



Second Annual Report

Christian Reformed World Relief Committee (CRWRC)

Bangladesh
Dhaka, Netrokona, Panchagor

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
BCG	Bacille Calmette-Guérin vaccine
BCM	Bengal Creative Media
CBO	Community Based Organization
CCI	Community Capacity Indicators
CCM	Community Case Management
CHA	Community Health Animator
CHV	Community Health Volunteer
C-IMCI	Community/Household Integrated Management of Childhood Illness
CRWRC	Christian Reformed World Relief Committee
CSP	Child Survival Project
CSSA	Child Survival Sustainability Assessment
CSTS+	Child Survival Technical Support Plus Project
CWI	Concern Worldwide, Inc.
DIP	Detailed Implementation Plan
DPT	Diphtheria, Pertussis, and Tetanus vaccine
EPI	Expanded Program on Immunization
FGD	Focus Group Discussion
GLP	Global Learning Partners
GOB	Government of Bangladesh
HBLSS	Home-Based Life Saving Skills
HFA	Health Facilities Assessment
HIV	Human Immunodeficiency Virus
ICDDR,B	International Center for Diarrheal Disease Research in Bangladesh
KPC	Knowledge, Practices, and Coverage survey
LAMB	Lutheran Aid to Medicine in Bangladesh
LNRA	Learning Needs Resource Assessment
LQAS	Lot Quality Assurance Sampling
MAMAN	Minimum Activities for Mothers and Newborns
MOH	Ministry of Health
NGO	Non-Governmental Organization
NID	National Immunization Days
NSDP	NGO Service Delivery Program
OCI	Organizational Capacity Indicators
ORS	Oral Rehydration Solution
PD	Positive Deviance
PDI	Positive Deviance Inquiry
PI	People's Institution
PVO	Private Voluntary Organization
TBA	Traditional Birth Attendant
TTBA	Trained Traditional Birth Attendant
TFD	Theatre for Development

UNICEF
USAID
WHO
WRA

United Nations Children's Fund
United States Agency for International Development
World Health Organization
Women of Reproductive Age

I. INTRODUCTION

The Christian Reformed World Relief Committee (CRWRC) received funding from the USAID Child Survival and Health Grants Program in the Entry category for a five-year program in Bangladesh that seeks to achieve and sustain improved health and rates of survival for children under age five and women of reproductive age.

The program targets two rural districts (Panchagor and Netrokona) and one urban district (Dhaka) in Bangladesh where rates of under five-child mortality (88 deaths/1,000 live births) and maternal mortality (322 deaths/100,000 live births) are very high (NIPORT, 2003; NIPORT, 2005). The six strategic objectives for CRWRC's Child Survival Project (CSP) are: 1) improve maternal and neonatal care; 2) prevent and properly treat diarrheal disease; 3) detect ARI and make appropriate referrals; 4) improve child nutrition; 5) reduce mortality and morbidity from vaccine preventable diseases; and 6) increase awareness about HIV/AIDS. In order to achieve these objectives, CRWRC works with three partner organizations: Pari (Netrokona), Sathi (Dhaka) and Supoth (Panchagor). Over the life of the project, CRWRC and its partners hope to directly benefit 5,072 children under five and 11,468 women of reproductive age (WRA).

CRWRC incorporated the strategic objectives into the three components of the Community/Household Integrated Management of Childhood Illness (C-IMCI) resulting in the following key intervention activities:

- 1) Improve networking with health facilities in order to refer complicated pregnancies and severe childhood illnesses.
- 2) Increase the quality and availability of pre-natal, natal and post-natal care through training of traditional birth attendants (TBAs).
- 3) Promote key family practices critical for child health and nutrition through training community health volunteers (CHVs) and forming primary groups.

This report describes the intervention activities that have been implemented and the modifications made during the second year of the CRWRC Child Survival Project (September 30, 2005 and September 30, 2006).

II. ANNUAL REPORT

A. Major Accomplishments

Project Objectives

The six strategic objectives for CRWRC's CSP reflect the technical intervention areas in which it works. Table 1 on page 9 depicts the number of primary and adolescent groups formed, the number of beneficiaries reached, and the number of TBAs and CHVs trained from the beginning of the project until the end of year two. A list of the major activities accomplished pertaining to the project objectives and the status of each activity appears in Table 2 on page 9.

CRWRC uses the People's Institution (PI) model in order to reach the maximum number of beneficiaries and create a sustainable system for building community capacity in maternal and child health. This model was designed by CRWRC in 1990 for its rural-based programs, and later adapted for urban-based programs. A People's Institution is a community-based organization composed of several smaller primary groups. The goal for the People's Institution, and the associated primary groups, is to become an independent, self-sustaining organization that has a lasting impact on their members and on the broader community. Each People's Institution works to become registered by the Government of Bangladesh (GOB) in order to achieve legal status and the ability to procure Government resources. All of CRWRC's CSP activities are targeted towards the members of the primary groups with the hope that the primary groups will have a greater impact on the broader community. Primary groups are the entry point for individuals into the People's Institution system and members have the opportunity to participate in activities and teaching regarding savings-based credit, health promotion, literacy and agriculture. Members from each primary group are also involved in a sector-specific technical team. The Child Survival Project focuses on the health technical team of which the CHVs and TTBA's are a part. The direct beneficiaries of the CSP are all members of a primary group and receive the benefits of each key activity addressed in the six strategic objectives below. A detailed description of the People's Institution model for community mobilization can be found in Section O.

Due to the effective model for community mobilization and the success of the child survival program in Panchagor and Netrokona, two new international donors have contributed to the scale-up of the child survival programs of Supoth (DANIDA, Denmark) and Pari (Enfants du Monde, Switzerland). The progress described below has the potential to have long-term impact on a greater number of beneficiaries through the child survival program.

Improve Maternal and Neonatal Care

One of the key activities for the improvement of maternal and neonatal care was providing quality prenatal, natal and postnatal care at the household level by training TBAs. All three partners achieved or exceeded their targets for training TBAs in the second year with the exception of Sathi, who trained 27 TBAs instead of 32. This was due to a temporary slowdown in work in two slum areas as a result of unexpected slum evictions. An additional five TBAs will be added to the third year cohort to account for the shortage in year two. The TBAs were selected and trained per the requirements described in the DIP. In Dhaka, 27 TBAs were trained by Radda Barnen (Save the Children, Denmark); in Netrokona, 25 TBAs were trained by Joyramkura Hospital; and in Panchagor, 25 TBAs were trained by LAMB Hospital. The training was both skills and knowledge based and included pre- and post-workshop testing of the TBAs. Once trained, the TTBA's are responsible for normal deliveries, making referrals, ensuring at least four prenatal visits, tetanus immunization, iron supplementation, deworming medication, and postnatal vitamin A supplementation. Among the direct beneficiaries in all three working areas, there was a dramatic increase in the number of deliveries conducted by a TTBA or other skilled personnel, the number of mothers who received at

least four prenatal visits prior to the birth of their youngest child, and the number of mothers who could report at least two maternal danger signs during the prenatal, natal and postnatal period. Dhaka and Netrokona also reported a significant increase in the number of women who had at least two tetanus toxoid immunizations before the birth of their youngest child; however, the number of women who received immunizations decreased slightly in Panchagor (Annex 1).

Due to the increased knowledge of maternal danger signs and the training received by the TTBAAs, more referrals took place last year for complicated pregnancies. The TTBAAs use a Health Facility Information Card to refer complicated pregnancies to the most appropriate facilities (Annex 2). A referral slip was created this year to track the outcome of each delivery referred by the TTBA (Annex 3). Most of the referrals took place in Dhaka, where there is a greater number of quality health facilities available. There were very few referrals for deliveries in Netrokona and Panchagor due to the distance between the communities and the health facility. An emergency transportation fund has been developed in these communities in order to help make the referral process more affordable, but the lack of health facilities continues to make access to quality health care an issue.

Prevent and Properly Treat Diarrheal Disease

One of the key activities for the promotion of key family practices at the household level was the training of CHVs to work with families to overcome diarrheal disease, ARI, malnutrition, vaccine preventable diseases, and HIV/AIDS. The CHVs are also responsible for making appropriate referrals for severe cases of diarrhea and ARI. All three partners achieved or exceeded their targets for training CHVs in the second year. The CHVs were selected and trained per the requirements described in the DIP. In Dhaka, 62 CHVs were selected and trained by the Sathi staff, who received a training of trainers course on maternal and child health issues by Radda Barnen. In Netrokona, 60 CHVs were trained by Joyramkura Hospital, and in Panchagor, 30 CHVs were trained by LAMB Hospital.

Mothers in all three working areas who were part of the CSP reported a dramatic increase in the use of oral rehydration solution and zinc as well as continued feeding and increased fluids when their child had diarrhea (Annex 1). CHVs also referred many more cases of severe diarrhea to appropriate health facilities using the Health Facility Information Card and referral slip (Annex 2 and 3).

In addition to the promotion of zinc at the household level by the CHVs, the increase in use of zinc for diarrhea can also be attributed to the zinc workshops that were conducted during year one for village doctors and drug sellers. In a follow-up survey conducted six months after the training, it was found that after receiving training, the zinc-use rate for diarrhea increased from 36% to 97% [OR=0.02, 95% CI (0.00-0.06, $p<0.001$]. These results were presented at the “Recent Advances in Scaling-Up Zinc – 2006” conference and the abstract can be found in Annex 8.

Detect ARI and Make Appropriate Referrals

Community Health Volunteers were also trained to detect ARI in order to refer children who were in need of treatment. The number of referrals for ARI increased dramatically this year. All three working areas reported over 90% of all children aged 0-23 months with fast or difficult breathing and/or cough in the last two weeks were taken to a health facility. Also, maternal knowledge of child danger signs increased dramatically compared to baseline with over 75% of all mothers able to identify at least two danger signs (Annex 1).

In addition to training CHVs to detect ARI and make appropriate referrals, 136 village doctors and drug sellers in all three working areas completed a training on diarrhea and ARI management following the IMCI module approved by the Government of Bangladesh. A six-month follow-up survey, similar to the zinc follow-up survey, will be conducted in year three to determine changes in practice regarding diarrhea and ARI.

Improve Child Nutrition

Although there was a slight decrease in the number of children who were underweight in Panchagor and Netrokona, the number of malnourished children in all three working areas remains very high (Annex 1). In order to address this need, two key staff from each partner organization participated in a Positive Deviance (PD) Hearth orientation facilitated by Concern Worldwide (CWI) and visited a PD Hearth session organized by CWI in Khulna. All three partner organizations started implementation of PD Hearth this year. Sathi and Supoth completed a market survey, Positive Deviance Inquiry (PDI), CHV orientation, community mobilization and identification of under-nourished children. Sathi will start the first PD Hearth session during October 2006 and Supoth will start in November 2006. Pari completed one PD Hearth session with 10 children while two other Hearth sessions are on going. Preliminary results showed that the first Hearth session resulted in an average weight gain of 1.2 kg in 30 days which is over twice the amount of weight needed to graduate from the program. CRWRC is hopeful that scaling-up PD Hearth will lead to a long-term positive impact on underweight children.

There was also a significant increase in the percentage of children aged 6-23 months who received a vitamin A dose in the past six months in each working area. This increase is attributable to the two National Immunization Days, where CHVs helped the government distribute vitamin A and anthelmintics in each working area. Each partner organization has helped establish linkages between the Union Health Officers and the CHVs working in each Union in order to ensure a sustainable system for the distribution of vitamins and other supplements.

Reduce Mortality and Morbidity from Vaccine Preventable Diseases

There was a significant increase, compared to baseline, in the percentage of children under 12 months who were fully immunized with one dose each of BCG and measles and three doses each of DPT and Polio (Annex 1). The CHVs continue to promote the importance of immunizations as well as participate in national immunization campaigns, such as measles and polio. The CHVs are also involved in Government training programs for the immunization campaigns and vitamin distribution programs.

Increase Awareness of HIV/AIDS

Although the prevalence of HIV is less than 1%, all of the risk factors needed for an explosive HIV epidemic are present in Bangladesh. With a rise in risky behaviors, such as intravenous drug use and commercial sex, the general population is at a greater risk. Community health volunteers have been building awareness about HIV and AIDS in primary groups and adolescent groups. As a result, there has been a significant increase in the knowledge of HIV prevention among mothers and young people (Annex 1).

Table 1: Beneficiaries, Group Formation, and People Trained in the Child Survival Project Working Areas Through Year 2.

Particulars		Dhaka		Netrokona		Panchagor		TOTAL	
		Actual	Target	Actual	Target	Actual	Target	Actual	Target
Primary Groups		147	147	95	95	134	134	376	376
Primary Group Members		2,532	2,550	1,574	1,520	2,631	2,650	6,737	6,720
Adolescent Groups	Girls	41	32	6	6	12	12	59	50
	Boys	17	18	2	2	12	10	31	30
Adolescent Group Members	Girls	419	380	118	115	289	280	826	775
	Boys	185	220	42	42	236	225	463	487
People's Institutions		14	14	3	3	1	1	18	18
Number of children under 5		1,299	1,500	1,875	1,014	1,382	1,300	4,556	3,814
CHVs Trained		131	108	95	95	55	55	281	258
TBAs Trained		59	64	50	50	50	50	159	164

Table 2: Major Accomplishments in Project Objectives

Project Objectives	Key Activities	Status of Activities	Comments
Improve Maternal and Neonatal Care	<ul style="list-style-type: none"> Select TBAs to be trained Train TBAs TTBAs supervised by CHAs and Health Coordinators Ensure TBAs are performing their duties according to the DIP. 	Complete Complete On going On going	In Dhaka, 5 TBAs will be added to the 3 rd year cohort to make up for the shortage in year 2.
Prevent and Properly Treat Diarrheal Disease	<ul style="list-style-type: none"> Select CHVs to be trained Train CHVs Refer severe cases Ensure CHVs are performing their duties according to the DIP. Follow-up with village doctors who participated in zinc workshop 	Complete Complete On going On going Complete	Patients are referred according to the Health Facility Information Card. A referral slip is being used to track the outcome of cases. See Annex 3 for an example. Results from the follow-up of the zinc training can be found in Annex 8.
Detect ARI and Make Appropriate Referrals	<ul style="list-style-type: none"> Facilitate workshop on ARI following IMCI module approved by MOH Refer severe cases Ensure CHVs are performing their duties according to the DIP. 	Complete On going On going	136 village doctors attended the ARI training in all three working areas.
Improve Child Nutrition	<ul style="list-style-type: none"> Develop growth monitoring groups and ensure proper growth 	Complete	Government growth monitoring card is being used in all working

	<ul style="list-style-type: none"> monitoring techniques ▪ Key staff trained in PD Hearth ▪ Implement PD Hearth ▪ Distribute vitamin A and anthelmintics with MOH ▪ Ensure CHVs are performing their duties according to the DIP. 	<p>Complete</p> <p>On going</p> <p>Complete</p> <p>On going</p>	<p>areas.</p> <p>Two staff from each partner organization were trained in PD/Hearth.</p> <p>During two NIDs, CHVs distributed vitamin A and anthelmintics in all three working areas.</p>
Reduce Mortality and Morbidity from Vaccine Preventable Diseases	<ul style="list-style-type: none"> ▪ Coordinate with Government EPI program to achieve better coverage. 	Complete	CHVs participated in Government measles campaign.
Increase Awareness of HIV/AIDS	<ul style="list-style-type: none"> ▪ Ensure CHVs are performing their duties according to the DIP. 	On going	

Cross-Cutting Intervention Areas

CRWRC has applied three cross-cutting strategies in the Child Survival Project: Community/Household Integrated Management of Childhood Illness (C-IMCI), the Child Survival Sustainability Assessment (CSSA) tool, and behavior change communication using the BEHAVE Framework. A list of the major activities accomplished within the cross-cutting intervention areas and the status of each activity appears in Table 3 on page 12.

Community/Household Integrated Management of Childhood Illnesses

CRWRC is a member of the National IMCI Working Group in Bangladesh and has been included in all three working areas as an implementing partner for C-IMCI. CRWRC also participated in the annual planning workshop for IMCI for the 2006-2007 year. The CRWRC Project Officer attended the C-IMCI Basic Training of Trainers course in November 2005 and the Advanced Course in January 2006. This training will allow CRWRC to train village doctors and drug sellers in the implementation of C-IMCI using the government approved modules. Last year, the module on diarrhea and ARI management was used to train these private practitioners.

The overall goal of CRWRC's Child Survival Project is aligned with the overall objective of the C-IMCI strategy in Bangladesh. The first element of C-IMCI is addressed through CRWRC's referral strategy implemented by CHVs and TTBA's in all three working areas. CRWRC uses a Health Facility Information Card that was developed from the Health Facilities Assessment in year one (Annex 2). This card is used by TTBA's and CHVs to refer maternal and neonatal complications as well as severe childhood illness. Once the patient is referred, the TTBA or CHV will use a referral slip to track the outcome of the patient and do follow-up (Annex 3). In addition to the referral tracking system, the health technical teams of each People's Institution meet with local health facility staff on a semi-annual basis to discuss further collaboration. The second element of C-IMCI is addressed through the increase in appropriate and accessible

maternal and neonatal care through TTBAAs as well as appropriate diagnosis and verbal referral of childhood illnesses by CHVs.

The second element of C-IMCI will also be addressed through the Community Case Management (CCM) of diarrhea and pneumonia by CHVs in Panchagor. The implementation of CCM in Panchagor has been approved by the National IMCI Working Group and was included as part of their 2006 workplan. The CCM of diarrhea and pneumonia will be conducted as operations research in year three (Annex 4).

The third element of C-IMCI is addressed through the promotion of key family practices in the primary groups by the CHVs (as described in the strategic objectives).

Child Survival Sustainability Assessment

CRWRC began using the CSSA framework in February 2005 as part of a technical assistance grant awarded by USAID in collaboration with CSTS+. The CSSA framework was introduced to CRWRC partner staff in the first year of the CSP during the development of the detailed implementation plan. CRWRC continues to work with each partner organization to select the most appropriate indicators for each of the six components. Each partner organization reports on their progress towards sustainability every six months. This information is shared with the health technical teams of the People's Institutions in order to establish ownership of the sustainability goals. The dashboard is used to make program decisions concerning strategic focus areas for sustainability for the next six months. Through assessing the six components, CRWRC hopes that the positive health outcomes achieved by the CSP will be sustainable within each community. Completed dashboards for all three partner organizations can be found in Annex 5.

Behavior Change Communication

During the second year, CRWRC started to focus on addressing barriers to behavior change in some of the more difficult to change behaviors. In March 2006, all three CRWRC partner organizations, CWI/Bangladesh, and Plan/Nepal participated in the Designing for Behavior Change Workshop facilitated by CRWRC in Dhaka. All of the participants learned how to plan for behavior change using the BEHAVE Framework and practiced using the tools associated with the framework for their own projects. The overall objective of this workshop was to provide Child Survival Project staff with the knowledge and the tools to develop a behavior change strategy that identifies the most important behaviors and creates a positive change in the communities in which they work.

The BEHAVE Framework focuses on four key decisions: 1) who are the priority groups and supporting groups, 2) what is the right behavior to promote, 3) what key factors (benefits and barriers) need to be addressed, and 4) what activities will be/are being implemented to promote the behavior. One of the most difficult decisions to make when using the BEHAVE Framework is determining which key factors need to be addressed. In order to help make this decision, a Doer/Non-Doer survey can be used. A Doer/Non-Doer survey is easy to do, requires small non-random samples (20 doers and 20 non-

doers), and helps to see beyond common assumptions about why the priority group does or does not practice a desired behavior. CRWRC conducted three Doer/Non-Doer surveys in all three working areas in order to discover the key factors associated with a number of behaviors that have been difficult to change including appropriate zinc supplementation during a diarrheal episode, exclusive breastfeeding, and appropriate complementary feeding practices (Annex 1).

Although there was a significant increase in the use of zinc during a diarrheal episode, the percent of mothers who used zinc remained below the midterm target of 50%. Therefore, a Doer/Non-Doer analysis was conducted in order to discover the barriers to using zinc during diarrhea. It was found that most women do not use zinc due to a lack of knowledge about its benefits. Other potential barriers to zinc use included loss of appetite, vomiting, and disapproval by husbands. A behavior change plan is being developed by all three partner organizations to address these barriers to using zinc during a diarrheal episode. Similar surveys were conducted for exclusive breastfeeding and appropriate complementary feeding practices, but the results are not available yet.

CRWRC continues to train community members in Theatre for Development in order to increase the community's capacity to provide preventive and promotional health services. Rather than remain dependent on an outside drama team to deliver these health messages, Bengal Creative Media (BCM) conducted the "Theatre for Development" training for community members. Local drama teams, composed of men and women, were trained and performed dramas incorporating key family practices for maternal and child health in the Dhaka, Netrokona and Panchagor working areas. There were over 5,000 community members in attendance in each working area. After the drama is performed, members of the drama team start small discussions with members of the audience about maternal and child health issues. The drama teams follow up monthly with sharing and teaching sessions regarding the lessons learned from the dramas. All three projects areas will continue to perform dramas about key family practices throughout the life of the project. To date, 120 community members have been trained in Theatre for Development (TFD).

Table 3: Major Accomplishments in Cross-Cutting Intervention Areas

Cross-Cutting Interventions	Key Activities	Status of Activities	Comments
Community/ Household Management of Childhood Illness	▪ Referrals continue between CHVs/TTBAs and the health facilities	On going	See Table 1 for a complete list of all groups formed, people trained and beneficiaries reached through year 2.
	▪ Village doctors and TBAs are trained to provide appropriate care	On going	
	▪ CHVs are trained to deliver messages on key family practices through primary groups and adolescent groups	On going	See Annex 4 for the CCM operations research proposal.
	▪ CCM operations research in Panchagor approved	On going	

Child Survival Sustainability Assessment	<ul style="list-style-type: none"> Use dashboards to monitor sustainability semi-annually for each project 	Complete	See Annex 5 for a list of indicators and dashboards for each project
Behavior Change Communication	<ul style="list-style-type: none"> Train staff to plan for behavior change using the BEHAVE Framework Conduct Doer/Non-Doer analyses Use BEHAVE Framework to address behaviors that have been difficult to change Train primary group members in community dramas Perform community dramas to communicate health messages 	Complete On going On going Complete Complete	Doer/Non-Doer analyses conducted for zinc use during a diarrheal episode, exclusive breastfeeding, and appropriate complimentary feeding practices. 120 men and women (40 in each project) have been trained to carry out Theater for Development. The new theatre groups each performed one drama in their areas.

B. Constraints to Achieving Goals and Objectives

Slum Eviction

This past year, there was an unexpected, Government-supported slum eviction from parts of the Sutrapur and Maniknagar slums in Dhaka. This affected a total of three out of 40 clusters. The Stutrapur slum dwellers were relocated by the Government to a previously unused area of Maniknagar, close to their original site. The majority of the primary group members from Sutrapur who were relocated remained in the Sathi program. For the Maniknagar slum, some of the primary group members moved to other areas, where the Sathi program is located, and remain in the program. However, other primary group members relocated to different parts of the city. Sathi has enrolled new primary group members into the Child Survival Project and feels it will be able to meet the number of target beneficiaries expected in the DIP. Sathi staff and People's Institution members played an advocacy role to ensure that housing was allocated nearby for the Sutrapur area. Sathi staff and People's Institution members continue to work closely with the local Government and through the Coalition for the Urban Poor, a local NGO, to ensure that housing and adequate living conditions are available for the urban poor.

Staff Drop-Out in Rural Working Areas

Currently, all CSP staff positions are filled. It was more difficult to find qualified staff for the rural-based projects of Panchagor and Netrokona; however, these positions were filled early in the second year. Two field level staff were released following the initial six month period, but new hires were made and the project is now fully staffed. CRWRC continues to keep a file of all applications so that people can quickly be called for interviews should a vacancy occur.

Work Overload in Netrokona

In Netrokona, the CSP is working in areas that have never previously been reached by Pari. Initially, the CSP staff were expected to form new primary groups and, then, begin implementing CSP activities along with the other integrated sector programs, including

agriculture, literacy and income generation. However, this proved difficult as much time was needed to establish CSP programs in the community. Pari was able to access funds from an Australian organization and hired field staff to do the general community development work, including the formation of primary groups. With the additional human resources, the CSP staff concentrated exclusively on the health program activities as outlined in the DIP. This is the model of work distribution that is used in the other two projects. Primary group formation is now going well, and the other components are being addressed by the additional staff in Netrokona. In spite of the challenges, the project in Netrokona has met or exceeded all year two targets for beneficiaries reached, groups formed, and people trained. (See Table 1 on page 9.)

C. Technical Assistance Required

Community Case Management

CRWRC received USAID permission to carry out operations research in Community Case Management for diarrhea and pneumonia using community health volunteers in Panchagor. The Government of Bangladesh has also approved this research. CRWRC has already made contact with Dr. Shams El Arifeen at ICDDR,B and USAID/Bangladesh for support in this research. CRWRC also hopes to have ongoing technical assistance during year three and is currently contacting potential international consultants for this role.

Kangaroo Mother Care

Following the Kangaroo Mother Care presentations at the MotherNewBorNet Conference in New Delhi in July 2006 and the Global Health Council annual meeting in June 2006, the CRWRC CSP team decided it would be helpful to add community-based kangaroo mother care activities to its CSP. This will enhance our portfolio of activities in maternal and child care in the community. LAMB Hospital, our subcontractor for TTBA and CHV training, has developed training modules on community-based kangaroo mother care and CRWRC plans to contract with them for special training for the CHVs and staff in our working areas. CRWRC has yet to finalize dates for this training, but it will likely be in February 2007.

D. Program Changes

Operations Research

In consultation with USAID Bangladesh, ICDDR,B, and USAID Washington, CRWRC decided to discontinue the operations research on the *Impact of Zinc and/or Anthelmintic Supplementation in Addition to Health Promotion in Malnourished Bangladeshi Children*. This decision was based on the delay in the USAID waiver for zinc procurement from Nutriset and consistent resistance from the GOB to allow zinc importation for any purpose. However, CRWRC decided to pursue an operations research proposal on the effectiveness of CCM for diarrhea and pneumonia using CHVs. CRWRC had worked together with three other PVOs based in Bangladesh

(CWI, Plan and Save the Children) to submit a proposal for CCM in Panchagor through the CORE Group. Although the proposal was not funded, CRWRC received positive feedback from the CORE Group and USAID. The proposal was rewritten and submitted as a replacement for the zinc operations research to be carried out in year three of the CSP. After consulting with the Maternal and Child Health Technical Advisor, Nazo Kureshy, USAID Washington provided concurrence at the end of August 2006 for CRWRC to move forward with CCM operations research. This change requires a modification to the budget, as explained below. CRWRC plans to start hiring appropriate staff, selecting an international consultant, consulting with ICDDR,B and USAID, and making preparations for the research in November 2006. The CCM proposal can be found in Annex 4.

Sampling Strategy for Program Monitoring

CRWRC's monitoring plan includes semi-annual nutrition surveillance reports. The nutrition surveillance consists of a shortened KPC survey focusing on the following: 1) nutritional status of children and mothers; 2) feeding practices of children aged 0-23 months; 3) consumption pattern of family foods by mothers and their children aged 6-23 months; 4) morbidity of children particularly diarrhea and acute respiratory infections; and 5) seasonal changes in nutrition and health. Nutrition surveillance was conducted using the 30-cluster random sampling methodology for the entire population of all three program areas (a total of 900 surveys twice per year). However, as the project progressed, the sampling methodology CRWRC was using was taking a lot of staff time and resources. In order to allow CSP staff to focus more on program implementation and not on program monitoring, CRWRC changed the sampling strategy to focus on monitoring the health status and behaviors of direct beneficiaries in each working area (that is, members of primary groups) and not the entire population of the working area. For the third round of nutrition surveillance, CRWRC used Lot Quality Assurance Sampling (LQAS) to select five to six lots in each working area and randomly sample 14 to 18 primary group members in each lot. This sampling methodology allowed CRWRC to monitor the changes in the direct beneficiaries of the CSP as well as reduce the amount of time needed to collect this information. Although the sampling strategy was different for the third round of nutrition surveillance, it is still possible to go back to the first two nutrition surveillance surveys and pull out information on direct beneficiaries from the random sample, so that comparisons could be made to the first year of the program. CRWRC will still conduct a 30-cluster random sample KPC survey of the entire working area during the mid-term and final evaluation.

Staff Changes

Program Manager Level of Effort

During the first two years, the CRWRC Senior Consultant staff provided 100 percent of her time and effort to the CSP as Program Manager. Now that the program is up and running, the Program Officer and full-time Health Coordinators are able to oversee and manage the activities of the program. The Program Officer is working 100 percent of time and manages the day-to-day program activities. Due to the changes in program needs, CRWRC feels that the Senior Consultant staff should reduce her time to 60

percent devoted to CSP. This change will require modifications to the budget, as explained below.

Program Officer

The Program Officer of the CSP was recently awarded the Diversity Visa through the U.S. Government annual Diversity Visa program. As his departure for the U.S. is scheduled by the Embassy for late November 2006, he will leave his CSP post on November 15, 2006. A new Program Officer has already been hired and will begin full-time work on November 1, 2006. This is sufficient overlap for a good orientation and handover. The new Program Officer has experience in CSP with CWI, has an MPH from the University of Sydney Australia, and currently works at Mitra and Associates, a leading survey and health statistical analysis company in Bangladesh.

Health Coordinator in Netrokona

Due to inadequate performance, the Health Coordinator of Pari was released mid way through the second year. A senior staff from Pari who has extensive health programming experience and much familiarity with the CSP (he lead the Pari KPC and all nutrition surveillance teams) was immediately assigned to the post of Health Coordinator. This was seen by all staff and stakeholders as an extremely positive move and the program in Netrokona is now running very well.

Budget Revisions

Changes to the operations research and the CRWRC Program Manager's level of effort make it necessary to modify the program budget. A revised budget, dated October 30, 2006, is provided in Annex 6. The changes that you should note in the budget include:

- 1) Since the Program Manager's level of effort is being reduced from 100% to 60%, the total cost of her salary and fringe benefits have been reduced for years 3, 4, and 5. As a result of this, \$49,423 in USAID funding that was originally budgeted for salary and fringe will no longer be required to cover this cost. In years 4 and 5, the entire cost of her salary and fringe benefits will be contributed by CRWRC as a cash match.
- 2) The new Community Case Management operations research will be more expensive than the zinc research that was originally planned. An additional \$14,200 was moved to this line item, bringing the total budgeted to \$30,750. See Annex 4 for a detailed budget for the new research that has been proposed.
- 3) For year one of the program, CRWRC had a final indirect cost rate of 7.81%. The provisional rate for year two has been 7.81% as well. Eleven percent was originally budgeted for NICRA. We have reduced the amount budgeted for NICRA to 9%, which will bring us closer to what our actual indirect expenses are likely to be over the life of the project. As result, the amount of USAID funding budgeted for NICRA for years 3, 4, and 5 has been reduced by a total of \$25,807.

- 4) The USAID funds that will no longer be needed for personnel costs and NICRA have been re-allocated in the following ways:
- Sub-grants to Pari, Sathi, and Supoth have been increased by \$5,000 each per year over years 3, 4, and 5. This total increase of \$45,000 is necessary to compensate for inflation and the weakening of the US dollar from 70 taka per dollar to 67 taka per dollar. Each of the partners needs to increase salaries to compensate for increased cost of living in addition to covering additional travel costs. Also, the new GOB National Nutrition Council scales that are purchased for the communities are more expensive.
 - The sub-contract to LAMB for training services has been increased by \$5,000 for year three, due to the addition of pre- and post-testing and increased the length of the TBA courses. Also, LAMB will do additional training on kangaroo care that was not originally planned.
 - The sub-contract to Global Learning Partners for training services has been increased by \$10,000 for year three, because we discovered in year two that the amount budgeted was not sufficient to cover all costs for participants to stay and travel to the training.
 - The sub-contract to BCM for training services has been increased by \$1,031 for year three, because we anticipate higher printing costs related to printing the record books for CHVs and TTBA's and because they are now doing different scripts for rural and urban, rather than just one script.

E. Program Monitoring Plan: Progress, Gaps and Programmatic Responses

Due to the change in the sampling strategy for program monitoring, described in Section D above, the results of the last nutritional surveillance survey will be interpreted differently than the baseline results. This difference must be taken into consideration when making conclusions about the results at the end of year two. The *actual* results from the nutritional surveillance survey in June 2006 presented in the program monitoring plan (Annex 1) were based on a random sample of primary group members in all three working areas, whereas the *baseline* results from the KPC survey in September 2004 were based on a random sample of the general population in all three working areas. Therefore, when comparing the results of the nutritional surveillance to the baseline results, one is comparing the impact of the CSP interventions in primary group members to the general population before any CSP interventions.

Section A describes the major accomplishments according to the program monitoring plan. However, there were a few areas in which programmatic gaps were identified. The three areas of most concern are appropriate hand washing practices, children who are underweight, exclusive breastfeeding, and appropriate complementary feeding practices (Annex 1).

All three CRWRC partner organizations have conducted Doer/Non-Doer surveys for exclusive breastfeeding and appropriate complementary feeding practices. The results from these qualitative surveys will be used to identify key factors for behavior change; including perceived barriers and perceived benefits to adopting the new behavior. The key factors will be used to develop interventions tailored to the women in each working area. A Doer/Non-Doer survey will be conducted in year three for hand washing in all three working areas. A similar strategy will be applied to use the results from the survey to design an effective behavior change strategy.

The high percentage of children under age five who are underweight at the end of year two is another area being addressed by the CSP. As described in Section A, CRWRC partner staff were trained to implement PD Hearth in all three working areas. However, only a few Hearth sessions have been initiated in the communities at this point. The one Hearth session that was completed showed very positive results. In year three, Hearth sessions will be scaled-up in order to rehabilitate malnourished children in all three working areas.

The impact of these interventions will be monitored in the primary groups using nutritional surveillance and evaluated in the general population during the mid term evaluation.

F. Sustainability Plan

CRWRC recognizes the importance of building sustainability into its interventions. Believing that community organizations should not remain dependent on either the PVO or the local NGO, CRWRC's Child Survival Project focuses on building the capacity of the communities in order to sustain positive health outcomes. One way in which CRWRC ensures the long-term success of their CSP strategic objectives is by using the People's Institution model. The People's Institution model begins with the formation of primary groups, which are groups of 15 to 20 men or women who participate in activities and teaching regarding savings-based credit, health promotion, literacy and agriculture. Primary groups are encouraged to each send one representative to a Central Committee (rural-based programs)¹. The Central Committee has increased savings and loan ability, in comparison to the primary groups. They also represent primary groups and are a mechanism for supervision and education. Likewise, Central Committees each send one representative to a regional group called a People's Institution. Once a People's Institution is able to achieve independent status, it is recognized by the Government as a registered community-based organization (CBO) (see Annex 7 for the People's Institution model). CRWRC and its partners consult with all these groups to build community and organizational capacity and viability. Effective health education and behavior change interventions have the potential to impact all the Central Committees and primary groups represented, and is more sustainable than relying on a foreign PVO.

¹ The urban project, Sathi, follows a two tier system and does not use the Central Committee structure as the People's Institutions are more numerous and geographically closer together than those in the rural areas.

Improved access to health services will be sustained by the People's Institutions. Through capacity building activities, the PIs will continue to network for health services in their communities. As part of the People's Institution health technical team, the CHVs will continue to provide access to services needed. The People's Institution in Panchagor received its Government registration in December 2004. This registration will help them in networking and procuring resources. The People's Institutions in Sathi have begun the registration process and are currently waiting for new Government guidelines on registration which are due in the immediate future. All PIs have started their emergency medical funds and set up bank accounts to keep these funds safe. The PIs have also developed and distributed the policies for fund use to the community members who deposit money into these funds on a monthly basis. These funds will be used for emergency transportation and other health related items including anthelmintics and iron tablets (in areas where they are not available from the Government). The PIs are keeping records as to the use of the funds and developing small income earning activities to increase the fund size.

A unique feature of the CSP is that the CHVs and the TTBAAs are volunteers who are selected by the People's Institutions. This is a new concept in Bangladesh, as most "volunteers" are given a stipend by the NGO. Sathi, Pari and Supoth are working with the PIs to develop this volunteer system. All PIs held their first annual gathering in recognition of the volunteers. The PIs plan to hold these gatherings each year for CHVs, TTBAAs, health technical team members, PI chairpersons, local leaders and TFD participants. The objectives for the annual recognition gatherings, as determined by the PI, are: 1) to increase the spirit of volunteerism, 2) to share the experiences in their work; 3) to prevent dropout, 4) to increase communication with the community, and 5) to build-up the confidence of the volunteers. CRWRC and its partners are continuing to work with the communities to develop the volunteer system and mindset of volunteerism in the communities.

As mentioned earlier, CRWRC is also implementing the Child Survival Sustainability Assessment (CSSA) framework in all three program areas in order to monitor the sustainability of health outcomes. All three areas have collected and analyzed data on the six components of the CSSA framework (Annex 5). This data will continue to be assessed on a semi-annual basis and used to make programmatic changes for the following six months.

G. Responses to Comments from First Annual Report

The following items were requested by USAID following the review of CRWRC's first annual report:

- 1) *Provide an update on the Operation Research.*

See Section D: Program Changes.

2) *Provide an update on the work to integrate values into the CSSA.*

CRWRC works to integrate values into all of its program activities. In 2002, staff from each of the Bangladesh partner organizations wrote a series of modules that are used in the communities to discuss various values. This has been ongoing and is included in the primary groups in the CSP areas.

CRWRC has not done any additional specific work on integrating values into the CSSA framework. We hope to do further qualitative research on the role of values in maternal and child health outcomes in the spring of 2007. The results from this research will be discussed with all three partners and they will decide the best way to incorporate these results into the CSSA.

3) *How is the project assessing the skills and effectiveness of CHVs and trained TBAs, as they are critical to improving access to quality services and the second element of C-IMCI?*

The TBAs and CHVs are given a knowledge-based test before and after their training courses. The TBAs are also given skills testing. Following the training, Community Health Animators (CHAs) hold monthly sessions with TTBAAs and CHVs to review cases, make recommendations and assess appropriateness of referrals. During the regular semi-annual meetings between the health technical teams and the health facility staff, the referrals are discussed and recommendations are made to the TTBAAs and CHVs in order to increase their effectiveness and the appropriateness of their referrals. CRWRC hopes to continue to increase the number of meetings between the health technical teams, TTBAAs, CHVs and health facilities in order to increase the quality of the work of the TTBAAs and CHVs.

4) *What is being done to improve the effectiveness of TBA training in addition to the modifications of the LAMB curriculum associated with improving skills-based work? Will delivery kits be provided to the TBAs?*

Seventeen trainers from the partner organizations and training institutions received a five-day dialogue education course entitled *Learning to Listen, Learning to Teach*. Each organization then revised their training materials to follow the dialogue education process, which is much more participatory and learner-centered compared to their old training materials. Initially, LAMB Hospital was the only training institution that had skills-based training. Joyramkura and Radda Barnen developed a training curriculum using the skills-based approach and continue to modify the learning design based on the needs of the participants.

Currently, the trainers visit the project sites and meet with potential participants prior to the training to assess their needs. Following the TBA course, there are semi-annual follow-up courses led by the training institutions. In addition to this, there are monthly meetings of the TTBAAs at the project sites led by the Health Coordinators of Sathi, Pari

and Supoth. During the monthly meetings cases are discussed, records reviewed and refresher training given. Visits to the referral centers are also conducted regularly to help develop the relationship between the health facilities and the TTBA's. On a semi-annual basis, the Health Coordinator and health technical team meet with the local health facilities to ensure that proper referrals are being made.

Following the initial training course, each TTBA is given a delivery kit from the host organization. The delivery kit contains items recommended by UNICEF and Save the Children, Bangladesh.

5) What is the project's relationship with the White Ribbon Alliance in Bangladesh?

CRWRC is one of 15 organizations that make up the core group of the White Ribbon Alliance. CRWRC actively participated in the meetings (usually bi-monthly) and hosted one of the meetings this past year. In September 2006, CRWRC participated in the Minimum Activities for Mothers and Newborns (MAMAN) workshop which was coordinated by the White Ribbon Alliance. The White Ribbon Alliance is also supplying monthly full page newspaper supplements on maternal and child health activities in Bangladesh. CRWRC is scheduled in early 2007 to contribute to the full page supplement with stories from our CSP field.

6) How do the project team and other stakeholders select best practices to share in the quarterly meetings of the Learning Circles? Have any changes resulted from this sharing/dissemination to date?

There are currently 18 organizations as members of the Learning Circle (two, including LAMB joined in this past year). Members include the three CSP implementing partners and the three training subcontract organizations. The CSP team, which includes the Program Manager, Monitoring Officer, Program Officer, and three Health Coordinators, make decisions regarding promising practices. The CSP team offers these ideas as potential topics for the Learning Circle. For example, during the August 2006 Learning Circle forum, there was a session on the development of a community volunteer system for CHVs and TTBA's in the community. Following this forum, two other member organizations have started this type of program. In addition, all Learning Circle members and several other NGOs requested a workshop on the Knowledge, Practices, and Coverage (KPC) baseline survey. CRWRC facilitated a KPC workshop in June 2006 and six organizations are now carrying out baseline surveys in health. Members have also participated in exchange visits to Supoth, Sathi and Pari to gain first hand information on the CSP interventions, which have been duplicated in their own working areas. The Learning Circle has proved to be an excellent vehicle for disseminating information and trainings on health to the broader NGO community.

7) Are any of local NGOs that were a part of the NGO service delivery project working in project area? Does the project plan to inform its programming with any relevant lessons of the NGO SDP evaluation? Does the project plan to share and diffuse these through the Learning Circle quarterly meetings?

The local NGOs that are part of NSDP are not currently in the Learning Circle. However, CRWRC is planning to invite some of the NSDP organizations that are in our immediate working areas to our next meeting. CRWRC plans to ask NSDP to share about the lessons learned from their evaluation. CRWRC and its partners will also share about their health programs and discuss ways to further strengthen the relationships between Learning Circle members and the local NSDP clinics. Locally, all three CRWRC CSP partner organizations (Supoth, Sathi and Pari) have good relationships with the NSDP clinics. Many of the NSDP clinics were part of the health facility assessment and are included as referral centers on the Health Facility Information Card for TTBAAs and CHVs.

H. Social and Behavior Change Strategy (First Year Only)

This topic is **not applicable** due to the fact that the annual report guidance addresses “projects in the first year” and CRWRC is finishing its second year.

I. Progress towards Phase Out (Final Year Only)

This topic is **not applicable** due to the fact that the annual report guidance addresses “projects entering their final year” and CRWRC is finishing its second year.

J. Family Planning Reporting (FP Programs Only)

This topic is **not applicable** due to the fact that the annual report guidance addresses “programs receiving family planning support” and CRWRC does not receive any FP support.

K. Tuberculosis Reporting (TB Programs Only)

This topic is **not applicable** due to the fact that the annual report guidance addresses “TB programs” and CRWRC is not a TB program.

L. Management System

Financial Management System

The NGO Affairs Bureau in Bangladesh approved the five year budget for the Child Survival Project of CRWRC. The project has a full time Finance Officer who is based at the CRWRC office in Dhaka, Bangladesh. A quarterly expense reporting template was set up by the CRWRC International Finance Manager in the U.S., which is completed by CRWRC staff in Bangladesh by the 10th of the month following the end of each quarter.

Each of the three partner organizations maintains separate bank accounts for the CSP. CRWRC receives payments for the CSP from its U.S. office. It then pays grants to the partners and sub-contracting organizations per the agreement with USAID and according to the regulations of the GOB. All vouchers and receipts related to the project are kept in the Dhaka office. In the second year of the CSP, the Finance Officer conducted quarterly visits to each of the three partner organizations to do an internal audit of the financial activities. The CSP Program Manager is responsible for the overall financial system and reviews and approves all financial reports. As part of the end of the first fiscal year, an external financial audit and financial management review took place on October 26, 2005 by a GOB approved firm, Azad Zamir and Company. This audit included a total review of CSP expenditures at the CRWRC/Bangladesh and partner level. CRWRC submitted the first year financial audit report to USAID in December 2005. This company will also conduct the second year audit in October 2006 with the report submitted to USAID in December 2006.

Human Resources

As there are three different projects (Sathi, Supoth and Pari) working under the CRWRC CSP, field staff (health animators) for the Child Survival Project were hired by the specific projects, with input from the CSP Program Manager. The three coordinators were hired by each project, with interviews conducted by the project directors and the CSP Program Manager. Job descriptions for these positions were prepared jointly by the three partners with input and final approval from the CSP Program Manager. There are currently 16 CSP health animators: four in Sathi, six in Supoth and six in Pari. Each organization also has a CSP Health Coordinator. All of the health animators hired have previous experience working in health related programs. The three Health Coordinators all have field experience in health programs as well as managerial experience.

All CSP staff received an initial two-week orientation to the specific project in which they were working. They also received a one-week orientation on the Child Survival Project. In addition to this, they had extensive training in specific health-related topics including baseline survey implementation, nutrition surveillance, values and health, dialogue education, BEHAVE framework, PD Hearth, CSSA, and supervision of CHVs and TBAs.

All second year annual performance assessments of each CSP staff have been completed. Cost of living and performance increments were awarded per CRWRC policy. These performance assessments are on file in each project office as well as in the CRWRC office. Reviews take place in March of each year.

Communication System and Team Development

The CSP Manager meets with the three Health Coordinators, the Monitoring Officer and the Program Officer on a monthly basis. Written monthly reports are presented by each project at this time and variances are reviewed. Mini-trainings on management and specific CSP-related topics are included in these two-day meetings. Also, each work plan is reviewed and finalized for the coming month. The CSP Program Manager has monthly communication with the Project Directors of each of the three projects regarding CSP activities. CRWRC Dhaka-based CSP staff visit each project on a

quarterly basis. Each of the three projects also has its own internal management system. The Health Coordinator of each of the projects is a member of the project management team and reports on CSP activities. CRWRC CSP staff receive copies of the minutes from the project management team meetings. The Health Coordinators also meet with the health animators in their projects on a monthly basis. These meetings include activity updates, variance reports, planning and mini-workshops.

Local Partner Relationships

The Learning Circle was formed in 1994 with four organizations. It has now expanded to 18 member organizations, with six more organizations on a waiting list. CRWRC considers the Learning Circle a valuable part of its consultancy to its partners and to other integrated community development NGOs. Much peer learning takes place with the organizations learning about each other's organizations and giving valuable feedback. The meetings also include mini-workshops on various topics, guest speakers from various forums, and dissemination of development information.

The three CSP organizations (Sathi, Pari and Supoth) have all been members of the Learning Circle since its inception. These three organizations are long standing partners of CRWRC. Two of the organizations (Pari and Supoth) have become national NGOs with their own registration. Sathi is still a direct project of CRWRC according to the Government Proforma, but it functions like all other partners operating under two-year, renewable partnership agreements. CRWRC maintains a good relationship with each of the three partners and, as part of the Learning Circle, CRWRC conducts regular surveys regarding the quality of its services to the partners and feedback as to how this can be improved.

The three CSP partner organizations have other donor organizations that fund other components in their projects. It is noteworthy that the new five-year DANIDA-funded components of Supoth includes a scaling-up of the health activities from Panchagor into 5 additional Thanas.

PVO Coordination/Collaboration in Country

CRWRC is registered with the NGO Bureau of Bangladesh and has received five-year approval from the GOB for the Child Survival Project. Each of the three partner organizations is also registered with the NGO Bureau as a local NGO. CRWRC and its partners are also members of various forums in Bangladesh including the PRA Forum, the Self Help Forum, the National AIDS Programs Forum, the Arsenic Forum and the Voluntary Health Association of Bangladesh. In addition to this, CRWRC is a core group member of the White Ribbon Alliance of Bangladesh, the National C-IMCI Working Group, and MotherNewborNet, which is supported by USAID and coordinated through ICDDR,B.

As described above, CRWRC also hosts a quarterly Learning Circle forum that consists of 18 local NGOs, all of whom have health programs. The Learning Circle includes training on various health-related topics and lessons learned from the Child Survival Project.

CRWRC also had several informal meetings with CWI in Bangladesh regarding child survival activities. CWI CSP staff participated in the CRWRC BEHAVE Framework workshop in March 2006. In May 2006 CWI Bangladesh provided PD Hearth training for 20 CRWRC CSP partner staff. In addition to collaborating with CWI, CRWRC worked together with Plan Bangladesh and Save the Children Bangladesh to develop a proposal for CCM in response to a Request for Solicitations by the CORE Group. Although, the proposal was not funded, CRWRC is moving forward with a similar concept for its operations research and will continue to work with CWI, Plan and Save the Children to scale-up CCM in Bangladesh.

Other Relevant Management Systems

CRWRC maintains regular contact with the subcontracting organizations, including BCM, LAMB, Joyramkura and Radda Barnen. All partnership agreements with these institutions were finalized in the first year and are proceeding according to contract. The CRWRC CSP Program Manager also meets with each of these institutions semi-annually to review progress and address any concerns.

As noted, CRWRC is involved with the three partner organizations in other integrated community development activities as well as the CSP. These activities are also reported on a quarterly basis in a results based management format.

Organizational Capacity Assessment

Over the past decade, CRWRC and its partner organizations developed an extensive organizational capacity indicator (OCI) system that is measured semi-annually by each project board, staff and stakeholders. Each community also uses a community capacity indicator (CCI) system to measure their progress. In this past year, the three partner organizations incorporated the OCI and CCI systems into the CSSA. A baseline and two semi-annual assessments have been conducted (see Annex 5) and the next measurement will take place in January 2007. The three projects carry out an extensive OCI at the board level to assess progress in overall organizational capacity areas.

M. Mission Collaboration

CRWRC Bangladesh has maintained regular contact with the local mission throughout the first two years of the grant. Through August 2006 CRWRC's primary contact at the USAID mission was Ms. Carrie Rasmussen of the Health and Population Division. Due to her departure in August, Mr. Kisan Chakroborty was assigned to CRWRC. Ms. Rasmussen visited the Sathi CSP program and also met all CSP coordinators at the CRWRC office. In the second year, the CRWRC CSP Program Manager met with Ms. Rasmussen quarterly to give updates about the program. Ms. Rasmussen also worked with CRWRC regarding the procedures for the procurement of zinc. CRWRC has held one meeting with Mr. Chakroborty. There is a plan for him to visit one of the CRWRC CSP areas in November 2006.

The USAID mission and CRWRC are in frequent communication with each other, through meetings and phone contacts. The USAID mission keeps CRWRC informed of mission activities and workshops and seeks CRWRC's input on various items as needed. The CRWRC CSP Program Manager attended two USAID partners workshops, and the CRWRC Accountant also attended meetings on branding and VAT procedures. CRWRC has a very positive relationship with USAID, which has helped to improve the quality of the Child Survival Project. We foresee that this relationship will continue to strengthen throughout the next three years of the grant.

CRWRC work supports the USAID Mission objectives related to maternal and child health. In meetings with Ms. Rasmussen, CRWRC reviewed how the CRWRC CSP objectives linked with the USAID Mission objectives of providing health care to the rural communities. Upon USAID's suggestion CRWRC has targeted indigenous communities in Netrokona and Panchagor, and to a lesser extent in Dhaka. CRWRC collaborates closely with the USAID-funded NSDP clinics and link with them for referrals. CRWRC also sought advice from the mission in the development of the CCM proposal, as well as presentations for various conferences.

N. Timeline for FY 2007

1) CHV, TBA and TFD Training Program for Year Three

Particulars	Partner Organization	Number	Time (Month and Year)	Conducted by
TBA Training	SATHI 1 st Batch 2 nd Batch Total	12 12 24	July 2007 August 2007	Radda Barnen
	PARI	25	June 2007	Joyramkura
	SUPOTH 1 st Batch 2 nd Batch 3 rd Batch Total	8 8 9 25	January, 2007 February, 2007 March, 2007	LAMB
CHV Training	SATHI	38	April-June 2007	Radda Barnen
	PARI	60	July 2007	Joyramkura
	SUPOTH	35 11 19	January 2007 March 2007 April 2007	LAMB
TBA Refresher Course	SATHI	32	March 2007	Radda Barnen
	PARI	25	June 2007	Joyramkura
	SUPOTH	35	January 2007	LAMB
Training in Theatre for Development	SATHI	20	January to March 2007	BCM
	PARI	20		
	SUPOTH	20		

2) Timeline of Other Major Activities

Activities	Participants	Location	Date
PD/Hearth program in all communities on a regular basis.	Under 5 undernourished children	In Panchagor, Netrokona and Dhaka	Started from August 2006
Community Case Management Operations Research	Under 5 children	Panchagor	November 2006
Dialogue Education Advanced Course Workshop	CSP Coordinators and CHA trainers from LAMB, Radda Barnen and Joyramkura who received the basic course	CRWRC offices, Dhaka	November 2006
Doer/Non-doer survey on breastfeeding and complementary feeding	Under 2 children and their family members	In Panchagor, Netrokona and Dhaka	November 2006
BEHAVE Framework develop on zinc use and activities started	Under 5 children and their family members	In Panchagor, Netrokona and Dhaka	November-December 2006
Adolescent Gathering Workshop	Adolescent (boys and girls)/PI's	In Panchagor, Netrokona and Dhaka	December 2006 January 2007
KPC survey	Communities under CSP; Survey conducted by CSP staff in each project	In Panchagor, Netrokona and Dhaka	January 2007
Dashboard and OCI/CCI measurement	Staff and community members in the 3 projects.	In Panchagor, Netrokona and Dhaka	January and July 2007
Workshops on Key Health Messages for People of Influence	Village Doctors, Community Leaders, etc.	Netrokona, Panchagor and Dhaka	February and August 2007
CHV and TBA/TTBA supervision workshop	19 Coordinators and Health Animators from the 3 projects	Conducted by LAMB, Radda and Joyramkura	February-March 2007
CHV's Gathering Workshop	CHV, TTBA, BCM and PI's Technical Team	In Panchagor, Netrokona and Dhaka	June-July 2007
Midterm Evaluation	Communities under CSP	In Panchagor, Netrokona and Dhaka	June 17-30, 2007
Nutrition Surveillance	Communities under CSP; Survey conducted by CSP staff in each project	In Panchagor, Netrokona and Dhaka	July 2007

In addition to the aforementioned major activities, CRWRC will continue to implement the following ongoing activities in year three:

- Primary group formation and development
- Growth monitoring
- Health promotion classes
- Development of health technical teams
- Community and organizational capacity development
- Learning Circle dissemination of learning and mini workshops
- PD/Hearth sessions in the community
- Behavior change activities
- Emergency fund development

- TTBA and CHV development and monitoring
- People's Institution health technical team quarterly meetings
- Semi-annual meetings between health technical teams and local clinics regarding referrals and collaboration

O. Results Highlight

The following five pages contain one-page highlights of innovative ideas, promising practices, and best practices that are emerging from CRWRC's child survival project.

Innovative Ideas – *Adult Dialogue Education for CHVs and TTBA*s

The problem being addressed: Many NGOs offer training for CHVs and TBAs; however, the majority of these trainings are only knowledge-based and are designed with little consideration of the needs of the learners. In focus group discussions conducted in 2000, prior to the start of the Child Survival program, CRWRC found that primary group members had a low retention rate of information taught by CHVs and TBAs. Although CRWRC had a good training program, it was not based on a learner-centered, skills-based design such as the seven design steps by Jane Vella.

The project's input to address it: CRWRC has been committed to the training of its staff in the Dialogue Education Approach of the Global Learning Partners (founded by Jane Vella). All CRWRC staff, including the CRWRC/Bangladesh consultant staff, have taken the basic dialogue education course as offered by GLP. The Monitoring and Evaluation Officer for the CRWRC CSP has been certified as a master trainer under the GLP system. In early 2006, CRWRC and GLP signed an agreement to provide training and consultation to improve the training process, the curriculum, and trainer facilitation skills for the CSP. The GLP system is based on an andragogy method, as applied by Jane Vella, using many of the principles developed by Malcolm Knowles. It draws heavily on principles of Kurt Lewin and Paulo Friere for a learner- and dialogue-based training which is designed following extensive learning needs assessments of the participants prior to the course. This approach includes many opportunities for practice teaching during the training sessions, and follow-up sessions are also included.

The magnitude of the intervention: Seventeen trainers from LAMB, Radda Barnen, Joyramkura, Sathi, Supoth and Pari were trained in basic dialogue education. All CHVs and TBAs (currently 281 CHVs and 159 TBAs) will be trained in basic dialogue education and curriculum development by these trainers. The CHVs and TBAs will carry out health lessons using this approach with over 7,000 primary group members and approximately 20,000 community members who are not directly involved in CSP activities.

Specific results: From June 3-7, 2006 the seventeen trainers received the dialogue education basic course from the CRWRC Bangladesh Consultant/Master Trainer. This entire course has been translated into the Bengali language and is now available for use in Bangladesh from CRWRC. Sathi is currently piloting a curriculum developed from the training for CHVs working in the Dhaka slums. All seventeen trainers will also participate in an advanced dialogue education and curriculum development course and a facilitation course in November 2006. In preparation for these courses, a Learning Needs and Resources Assessment has been designed and is being conducted with all CHVs and TBAs as well as a sampling of community members to determine the effectiveness of the current curriculum and recommendations for changes. CRWRC believes that this robust, learner-centered training program will result in improved skills-based learning in the field and a higher retention of health information in the community.

Innovative Ideas – *Emergency Health Funds*

The problem being addressed: Baseline information from focus group discussions revealed that a barrier to seeking care among CSP beneficiaries was access to the referral centers. Parents or women are often told to go to a clinic or health care provider, but they often do not go due to lack of transportation and lack of funds. The lack of transportation is a major barrier to health care in rural areas due to the long distance to the local clinics and treatment centers. The lack of transportation is partially due to the availability of vehicles as well as the high cost involved for transportation. The lack of funds is a major barrier in rural and urban areas. Many people do not have money available when emergency treatment is needed. Borrowing money from local money lenders results in debts and large interest rates that have devastating consequences for families, including losing land and property.

The project's input to address it: Following discussions with the People's Institutions in Netrokona, Panchagor and Dhaka, the PI members decided to develop emergency health funds to provide assistance for the cost of medical treatment and for transportation costs (rural areas) to the health centers. The Panchagor PI also made a long term decision to include savings for the purchase of a small ambulance. Each of the PIs, in consultation with the projects' CSP staff, has developed and approved emergency fund bi-laws. Every month, each primary group collects a small amount of money from each group member and deposits the money with the PI, which keeps a bank account. The members, or the TTBA's and CHVs on their behalf, can apply for emergency health funds. Systems are in place to ensure twenty-four hour availability of the funds and health services. There is also provision for non-primary group members in the community to use this fund through the same interest free loans. For the extremely poor, who are unable to pay back loans, there are provisions for receiving funds without a loan. This decision is made by the health technical team in consultation with the CHV or TTBA involved and is determined on a case-by-case basis.

The magnitude of the intervention: The direct beneficiaries are the primary group members, currently numbering around 7,000. However, all residents of the target communities are able to benefit from the emergency health funds, even if they do not belong to a primary group. This results in over 100,000 indirect beneficiaries.

Specific results: All PIs have started their emergency health funds and primary group members are contributing money on a monthly basis. Bank accounts have been opened by the PIs in Dhaka and Panchagor (this has been delayed in Netrokona due to bank regulation compliance procedures). In Netrokona, the fund is currently 9,000 taka and funds have already been withdrawn for four referrals of primary group members. In Panchagor, the fund is over 32,000 taka and funds have been withdrawn for nine referrals. In Sathi, the fund is 55,000 taka and funds have been withdrawn for seven referrals. Each month, the Panchagor and Netrokona health technical teams decide how much of the fund to set aside for the long term vehicle purchase plan. In the meantime, group members can request funds for transportation to referral centers.

Promising Practices – Zinc Education with Village Doctors and Drug Sellers

The problem being addressed: The CSP baseline survey findings showed that about 50% of children with diarrhea received treatment from village doctors or drug sellers. Few children received zinc syrup prescribed by the local health care providers. Following the findings, CRWRC conducted a market survey and noted that of twenty brands of zinc syrup available at least five brands were present in the local markets in our working areas. In mid-September 2005, survey findings showed that the majority of the private providers did not know the appropriate use of zinc, and only 2% of children with diarrhea received zinc syrup along with ORS. CRWRC hypothesized that training of village doctors and drug sellers will increase the rate of use of zinc along with ORS in children with diarrhea.

The project's input to address it: Training was provided to village doctors and drug sellers on the use of zinc syrup available in the market along with ORS in children with diarrhea. Guidelines were followed as recommended by WHO/UNICEF. Two-hour, interactive training sessions were conducted in each area during September-November 2005.

The magnitude of the intervention: A total 121 private providers participated (Dhaka 64, Netrokona 25, and Panchagar 32). In addition, 100 local elites, leaders, teachers, other NGO health professionals, and local Government health personnel also participated in the training programs. All the targeted children (aged 0-59 months) in our working areas are covered by these private providers.

Specific results: After receiving training, zinc-use rate by village doctors and drug sellers for children with diarrhea increased significantly from 36% at baseline to 97% after intervention [OR=0.02, 95% CI (0.00-0.06), $p<0.001$]. At baseline, only 2% of children with diarrhea received zinc syrup along with ORS. After the intervention, use of zinc along with ORS in children with diarrhea increased significantly to 17% [OR=0.10, 95% CI (0.02-0.36), $p<0.001$]. It was clear that training village doctors and drug sellers demonstrated a significant increase in the population's usage of zinc during childhood diarrhea. See Annex 8 for a more detailed account of the results from this study.

Promising Practices – *People's Institution Model*

The problem being addressed: In Bangladesh, most NGOs working in integrated community development follow a community mobilization model which consists of villagers or slum dwellers forming small groups of 15-20 people. The small groups participate in literacy, health, income generation, and agriculture programs developed by the NGO. Often, when the NGO leaves, the small groups tend to dissolve due to dependence on the NGO. CRWRC's mission is to help communities develop their own sustainable community-based organizations (CBOs) that will continue to function after the local NGO moves to other areas.

The project's input to address it: In the early 1990's, CRWRC developed a three-tier system of group formation beginning with the primary groups which are formed at the village level. This was supplemented by Central Committees, which helped to oversee the daily activities of the primary groups in the small geographic unit called a union. As these groups developed and flourished, the communities and CRWRC's partner organizations realized that a CBO would help primary groups with advocacy, ensuring the continuation of activities at the local level, networking with Government and other NGOs, procuring resources, and assisting the broader communities in which they lived. The CBO, also known as a People's Institution (PI), represents a larger geographic area and is registered with the Government. At the beginning of the CSP in 2004, CRWRC and its partner organizations worked with the PIs to develop a stronger health support system in the community that would ensure sustainability of the CSP interventions. The PIs ensure that the CSP activities are reaching all members as well as the broader community. Each PI has a health technical team that is responsible for selecting TBAs and CHVs for training, as well as establishing linkages with local clinics and Government health services. This system is designed to be embedded in the community and not dependent on the external NGO.

The magnitude of the intervention: The PI model includes all 376 primary groups and almost 7,000 individuals in the CSP, as well as an additional 547 primary groups and 15,000 individuals in the non-CSP activities of the three projects.

Specific results: Each of the six PIs under the CSP program is now functioning with a leadership executive body and a health technical team made up of at least six members. The PIs meet formally on a monthly basis to review reports of activities by the various technical teams. The six health technical teams directly oversee the work of the CSP in their localities. They have selected the 281 CHVs and 159 TBAs for training and continue to work with the local Government to procure resources and provide necessary health services. The health technical team is also working to involve the broader community in the programs and arranges semi-annual nutrition surveillance information dissemination meetings, monthly drama events, fathers meetings, and other gatherings for the entire community. They are working to involve the whole community in improving and sustaining health care for all community members. (See Annex 7 for a depiction of the People's Institution Model.)

Best Practice – *Monitoring of Child Survival Sustainability*

The problem being addressed: In order to ensure the long-term success of their projects, it is critical for NGOs to build key factors of sustainability into their planning, implementation and monitoring activities. However, planning for and monitoring sustainability can be quite complicated. Sustainable health outcomes are the result of a number of interacting and interconnected variables that are related to the entire development process. It is important for NGOs to assess the key factors that influence sustainable health in order to determine which areas need to be addressed in the future.

The project's input to address it: CRWRC and its partner organizations used the Child Survival Sustainability Assessment (CSSA) framework with the health technical teams of the People's Institutions in order to ensure the community's commitment to and ownership of sustainable health outcomes. CRWRC used the CSSA framework in conjunction with the Organizational Capacity Indicator (OCI) and Community Capacity Indicator (CCI) systems that were already in place for each partner organization prior to the Child Survival Program. The OCI and CCI systems track the capacity growth of the local NGO, the community-based organizations (also known as People's Institutions), and the primary groups in the communities using an appreciative inquiry approach. Each group has developed key indicators and a scoring system, which it uses to measure its own progress. The same participatory model is used to assess the other areas of the CSSA framework, including health outcomes, health services, and the enabling environment.

Every six months, each partner organization assesses its progress towards sustainability with the community. The information is depicted using a dashboard diagram and shared with the health technical teams and other primary group members. The NGO and health technical team make decisions together about the future direction of the project to achieve sustainable results and develop an action plan.

The magnitude of the intervention: The six health technical teams who are part of the People's Institutions are directly involved in making program decisions that impact 7,000 primary group members and over 100,000 members of the broader communities.

Specific results: All three partner organizations reported excitement and commitment by the health technical teams and primary group members regarding the CSSA framework. Community members appreciate the dashboard diagram and look for areas of growth and areas in which to improve. In Netrokona, there was significant growth in organizational capacity and viability compared to baseline due to the fact that there were no People's Institutions present in their working area at the start of the CSP. In Panchagor, there was significant growth in organizational viability and health services compared to baseline due to increased networking with the Government and local health facilities. In Dhaka, there was significant growth in health services compared to baseline due to the increased referrals to and linkages with health facilities. The actual dashboard diagrams can be found in Annex 5.

P. Topics that Do Not Apply

Topics in the Annual Report Guidelines that do not apply to the CRWRC CSP have been indicated.

Q. Other Relevant Topics

There are no additional topics on which to report.

R. Publications and Presentations

Sarkar N, TenBroek N, Daring K, and Story W. Scaling-up zinc for young children with diarrhea through village health care providers and drug-sellers: findings of a pilot study from a child survival program in Bangladesh. *Recent Advances in Scaling-Up Zinc – 2006 Conference*. International Centre for Diarrheal Disease Research, Bangladesh. Dhaka: April, 2006. (See abstract in Annex 8.)

Sarkar N, TenBroek N, Daring K, and Story W. Promotion of infant and young child feeding practices through community health volunteers: experience from a child survival program in Bangladesh. *2nd National Conference on Breastfeeding and Complementary Feeding*. Dhaka: August, 2006. (See abstract in Annex 9.)

III. REFERENCES

The Child Survival and Technical Support (CSTS) Project. Reaching Communities for Child Health and Nutrition: A Framework for Household and Community IMCI. April 2001.

Child Survival Collaborative and Resources Group (CORE). A Resource Guide for Sustainably Rehabilitating Malnourished Children. February 2003.

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National Institute of Population Research and Training (NIPORT), ORC Macro, Johns Hopkins University and ICDDR,B. 2003. Bangladesh Maternal Health Services and Maternal Mortality Survey 2001. Dhaka, Bangladesh and Calverton, Maryland (USA): NIPORT, ORC Macro, Johns Hopkins University, and ICDDR,B.

National Institute of Population Research and Training (NIPORT), Mitra and Associates, and ORC Macro. 2005. Bangladesh Demographic and Health Survey 2004. Dhaka, Bangladesh and Calverton, Maryland [USA]: National Institute of Population Research and Training, Mitra and Associates, and ORC Macro.

Annex 1

Program Monitoring Plan: Results from Nutritional Surveillance, June 2006²

BOLD = KPC Rapid CATCH Indicators

<i>Intervention areas</i>	<i>Indicators</i>	<i>Panchagor</i>	<i>Netrokona</i>	<i>Dhaka</i>
Strategic Objective I. Improve Maternal and Neonatal Care				
Delivery by Skilled Health Personnel (including TTBA's)	Percentage of children aged 0-23 months whose births were attended by skilled health personnel	Actual %: 77 Baseline %: 18 MT target %: 42	Actual %: 33 Baseline %: 21 MT target %: 30	Actual %: 60 Baseline %: 35 MT target %: 46
Prenatal Care Coverage	Percentage of mothers who had at least 4 prenatal visit prior to the birth of her youngest child less than 24 months of age	Actual %: 73 Baseline %: 19 MT target %: 43	Actual %: 15 Baseline %: 6 MT target %: 14	Actual %: 44 Baseline %: 34 MT target %: 65
Tetanus Toxoid (TT)	Percentage of mothers who received at least two tetanus toxoid injections before the birth of the youngest child less than 24 months of age	Actual %: 75 Baseline %: 80 MT target %: 88	Actual %: 93 Baseline %: 62 MT target %: 72	Actual %: 93 Baseline %: 59 MT target %: 75
Knowledge on Maternal Danger Signs/Symptoms	Percent of mothers of children age 0-23 months able to report at least two known maternal danger signs/symptoms during the prenatal, natal and postnatal period	Actual %: 90 Baseline %: 33 MT target %: 43	Actual %: 91 Baseline %: 31 MT target %: 40	Actual %: 53 Baseline %: 37 MT target %: 62
Strategic Objective II. Prevent and Properly Treat Diarrheal Disease				
ORT Use During Diarrheal Episode	Percentage of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids (RHF)	Actual %: 58 Baseline %: 64 MT target %: 72	Actual %: 84 Baseline %: 56 MT target %: 65	Actual %: 94 Baseline %: 55 MT target %: 70

² Baseline data was collected in January 2005 using 30-cluster random sampling for the population of each working area. Nutritional Surveillance data was collected in June 2006 using LQAS for the direct beneficiaries of each working area.

Intervention areas	Indicators	Panchagor	Netrokona	Dhaka
Increased Fluid and Continued Feeding During a Diarrheal Episode	Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered more fluids AND the same amount or more food during the diarrheal episode	Actual %: 75 Baseline %: 7 MT target %: 50	Actual %: 81 Baseline %: 7 MT target %: 42	Actual %: 100 Baseline %: 27 MT target %: 48
Increased Fluid and Continued Feeding During an illness³	Percent of children aged 0-23 months with an illness in the last two weeks who were offered more fluids AND the same amount or more food	Actual %: 30 Baseline %: 57 MT target %: NA	Actual %: 70 Baseline %: 64 MT target %: NA	Actual %: 86 Baseline %: 94 MT target %: NA
Zinc Supplementation During Diarrheal Episode	Percentage of children aged 0-23 months with diarrhea in the last two weeks who received recommended oral zinc therapy during the illness	Actual %: 42 Baseline %: 14 MT target %: 45	Actual %: 36 Baseline %: 11 MT target %: 50	Actual %: 22 Baseline %: 9 MT target %: 50
Hand Washing	Percentage of mothers of children age 0-23 months who wash their hands before food preparation, before feeding children, after defecation and after attending a child who has defecated	Actual %: 13 Baseline %: NA MT target %: NA	Actual %: 23 Baseline %: NA MT target %: NA	Actual %: 8 Baseline %: NA MT target %: NA
Strategic Objective III. Detect ARI and Make Appropriate Referrals				
ARI Care Seeking	Percentage of children aged 0-23 months with fast or difficult breathing and/or cough in the last two weeks who were taken to a health facility	Actual %: 91 Baseline %: 29 MT target %: 42	Actual %: 93 Baseline %: 8 MT target %: 18	Actual %: 100 Baseline %: 63 MT target %: 75

³ Baseline data for this indicator was not collected. The baseline data presented in this table was collected during the September 2005 Nutritional Surveillance.

Intervention areas	Indicators	Panchagor	Netrokona	Dhaka
Maternal Knowledge of Child Danger Signs/ Symptoms	Percentage of mothers of children age 0-23 months who report at least two of child danger signs/symptoms	Actual %: 95 Baseline %: 70 MT target %: 75	Actual %: 98 Baseline %: 73 MT target %: 78	Actual %: 73 Baseline %: 28 MT target %: 78
Strategic Objective IV. Improve Child Nutrition				
Underweight	Percentage of children aged 0-23 months who are more than 2 standard deviations (SD) below the median weight-for-age (WA) of the WHO/NCHS reference population	Actual %: 24 Baseline %: 38 MT target %: 30	Actual %: 29 Baseline %: 41 MT target %: 30	Actual %: 41 Baseline %: 39 MT target %: 30
Exclusive Breastfeeding	Percentage of children aged 0-5 months who were fed breast milk only in the last 24 hours	Actual %: 62 Baseline %: 88 MT target %: 90	Actual %: 63 Baseline %: 74 MT target %: 79	Actual %: 66 Baseline %: 39 MT target %: 80
Appropriate Complementary Feeding Practice	Percentage of infants aged 6-9 months who received semi-solid or family foods in the last 24 hours	Actual %: 53 Baseline %: 27 MT target %: 42	Actual %: 44 Baseline %: 14 MT target %: 70	Actual %: 69 Baseline %: 55 MT target %: 65
Vitamin A Coverage	Percentage children aged 6-23 months who received a Vitamin A dose in the past six months	Actual %: 66 Baseline %: 62 MT target %: 75	Actual %: 70 Baseline %: 61 MT target %: 67	Actual %: 79 Baseline %: 53 MT target %: 65
Strategic Objective V. Reduce Morbidity and Mortality from Vaccine Preventable Diseases				
Complete Immunization Coverage	Percentage of children under 12 months fully immunized with 1 dose each of BCG and measles and 3 doses each of DPT and Polio	Actual %: 86 Baseline %: 57 MT target %: 72	Actual %: 42 Baseline %: 32 MT target %: 60	Actual %: 60 Baseline %: 28 MT target %: 50

<i>Intervention areas</i>	<i>Indicators</i>	<i>Panchagor</i>	<i>Netrokona</i>	<i>Dhaka</i>
Strategic Objective VI. Increase Awareness of HIV/AIDS				
Maternal Knowledge of HIV Risk Reduction	Percentage of mothers of children age 0-23 months who mention at least two of the responses that relate to safer sex or practices involving prevention of HIV	Actual %: 83 Baseline %: 12 MT target %: 50	Actual %: 58 Baseline %: 13 MT target %: 55	Actual %: 72 Baseline %: 51 MT target %: 65

Annex 2



REFERRAL SERVICES INFORMATION CARD

Child Health & Survival Program

Sutrapur Area

List of Health Service Centers:

Prenatal Care	Delivery (Normal)	Delivery (Complicated)	Postnatal Care	Child Treatment
<ul style="list-style-type: none"> ❖ Surjer Hasi ❖ Paribarik Shastha Clinic ❖ Salauddin General Hospital ❖ Red Cresecent Hospital 	<ul style="list-style-type: none"> ❖ TTBA ❖ Salauddin General Hospital ❖ Red Cresecent Hospital 	<ul style="list-style-type: none"> ❖ Salauddin General Hospital ❖ Red Cresecent Hospital 	<ul style="list-style-type: none"> ❖ Surjer Hasi ❖ Paribarik Shastha Clinic ❖ Salauddin General Hospital ❖ Red Cresecent Hospital 	<ul style="list-style-type: none"> ❖ Surjer Hasi ❖ Paribarik Shastha Clinic ❖ Salauddin General Hospital ❖ Red Cresecent Hospital



স্বাস্থ্য সেবা গ্রহণের জন্য তথ্য কার্ড

মা ও শিশু স্বাস্থ্য কর্মসূচী

সূত্রাপুর এলাকা

স্বাস্থ্য সেবা দানকারী কেন্দ্রের তালিকাঃ

প্রসব পূর্ব যত্ন	প্রসবকালীন যত্ন (স্বাভাবিক)	প্রসবকালীন যত্ন (জটিল)	প্রসবোত্তর যত্ন	শিশুর চিকিৎসা
<ul style="list-style-type: none"> ❖ সূর্যের হাসি ❖ পারিবারিক স্বাস্থ্য ক্লিনিক ❖ সালাউদ্দীন জেনারেল হাসপাতাল ❖ রেডক্রিসেন্ট হাসপাতাল 	<ul style="list-style-type: none"> ❖ টিটিবিএ ❖ সালাউদ্দীন জেনারেল হাসপাতাল ❖ রেডক্রিসেন্ট হাসপাতাল 	<ul style="list-style-type: none"> ❖ সালাউদ্দীন জেনারেল হাসপাতাল ❖ রেডক্রিসেন্ট হাসপাতাল 	<ul style="list-style-type: none"> ❖ সূর্যের হাসি ❖ পারিবারিক স্বাস্থ্য ক্লিনিক ❖ সালাউদ্দীন জেনারেল হাসপাতাল ❖ রেডক্রিসেন্ট হাসপাতাল 	<ul style="list-style-type: none"> ❖ সূর্যের হাসি ❖ পারিবারিক স্বাস্থ্য ক্লিনিক ❖ সালাউদ্দীন জেনারেল হাসপাতাল ❖ রেডক্রিসেন্ট হাসপাতাল

ପ୍ରାକାଶନ ଟିମ୍ମ
ସ୍ତ୍ରୀ ଓ ସ୍ୱଳ୍ପ ସାହୁ ଉତ୍ତରଣ କର୍ମଚାରୀ

ନାମ:.....
ପଞ୍ଜୀକୃତ ନାମ:.....
ସ୍ଥାନ:.....
ଠିକଣା:.....
ପ୍ରାକାଶନ କାର୍ଯ୍ୟ:.....
ପ୍ରାକାଶନ କାର୍ଯ୍ୟ:.....
ପ୍ରାକାଶନ କାର୍ଯ୍ୟ:.....
ପ୍ରାକାଶନ କାର୍ଯ୍ୟ:.....
ପ୍ରାକାଶନ କାର୍ଯ୍ୟ:.....
ପ୍ରାକାଶନ କାର୍ଯ୍ୟ:.....

Referral Slip
Maternal and Child Survival Project

Name of Organization:.....
Name of patient:.....
Age:.....
Address:.....
Referral date:.....
Reasons for referral:.....
Where is referred:.....
Who referred:.....
Treatment received:.....
Signature:.....
Date:.....

Community Case Management of Diarrhea and Pneumonia through Community Health Workers in Rural Northern Bangladesh

Operations Research Proposal

**Christian Reformed World Relief Committee (CRWRC)
Panchagor District, Bangladesh
1 November 2006 to 31 October 2007**

**Total Budget:
\$37,050**



LIST OF ACRONYMS

ARI	Acute Respiratory Illness
BDHS	Bangladesh Demographic and Health Survey
BRAC	Bangladesh Rural Advancement Committee
CCM	Community Case Management
CHV	Community Health Volunteer
C-IMCI	Community/Household Integrated Management of Childhood Illness
CRWRC	Christian Reformed World Relief Committee
CSP	Child Survival Project
GOB	Government of Bangladesh
IMCI	Integrated Management of Childhood Illness
ORS	Oral Rehydration Solution
TBA	Traditional Birth Attendant
TTBA	Trained Traditional Birth Attendant
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization
WRA	Women of Reproductive Age

SIGNIFICANCE OF THE STUDY

The Bangladesh Demographic and Health Survey (BDHS) report in 2004 revealed that the infant and child (1-4 years) mortality rates were 65 and 24 per 1,000 live births, respectively (NIPORT, 2004). Over the last few years under-five mortality has declined substantially; however, it remains very high. Comparison of the 1999-2000 BDHS data with that of the 2004 BDHS showed a substantial improvement in child (1-4 years) survival (30 vs. 24), but no change in infant survival in recent years (66 vs. 65) (NIPORT, 2005). Pneumonia and/or diarrhea are the leading causes of death in under-five children which accounted for 35% of all deaths (ICMH, 2003). About half of the children with diarrhea do not visit any health care provider and only approximately 10% of sick children received care from trained health staff (Nasrin et al., 2006; IMCI, 2004). To overcome this problem the Government of Bangladesh has taken the initiative to implement the Community Integrated Management of Childhood Illness (C-IMCI) program. One of the strategic objectives of the C-IMCI program is to improve the households' and community's response to childhood illness and the quality of care provided at home. One of the key areas for C-IMCI to address is the prevention of diarrhea and pneumonia. The experience of ARI control in seven studies in different countries showed that case management of childhood pneumonia in villages was possible (WHO, 1989). More recently, in a study implemented by the Bangladesh Rural Advancement Committee (BRAC), it was found that diagnosis and treatment of acute respiratory illness (ARI) at the household level was possible if intensive basic training and close supervision of community health volunteers (CHVs) was provided (Hadi, 2003). Therefore, in order to make the most significant impact on child mortality it will be crucial to train CHVs in case management of diarrhea and pneumonia. Hadi (2003) also mentioned that in order for the management of ARI by CHVs to be adopted by the Government of Bangladesh (GOB), there must be intense monitoring and close supervision of the program. Thus, results of the proposed study will integrate Government systems into the implementation and evaluation of community case management (CCM), therefore complementing and strengthening the Government C-IMCI implementation strategy. It is hoped that out of this work, CRWRC and the Government IMCI working group can develop the protocol for scaling up the role of the CHVs in the management of diarrhea and pneumonia.

BACKGROUND

The Christian Reformed World Relief Committee (CRWRC) received funding from the USAID Child Survival and Health Grants Program in the Entry category for a five-year program in Bangladesh that seeks to achieve and sustain improved health and rates of survival for children under age five and women of reproductive age.

The program targets two rural districts (Panchagor and Netrokona) and one urban district (Dhaka) in Bangladesh where rates of under five-child mortality (88 deaths/1,000 live births) and maternal mortality (322 deaths/100,000 live births) are very high (NIPORT, 2003; NIPORT, 2005). The six strategic objectives for CRWRC's Child Survival Project (CSP) are: 1) improve maternal and neonatal care; 2) prevent and properly treat diarrheal disease; 3) detect acute respiratory illness (ARI) and make appropriate referrals; 4) improve child nutrition; 5) reduce mortality and morbidity from vaccine preventable diseases; and 6) increase awareness about HIV/AIDS. In order to achieve these objectives, CRWRC works with three partner organizations: Pari (Netrokona), Sathi (Dhaka) and Supoth (Panchagor). Over the life of the

project, CRWRC and its partners hope to directly benefit 5,072 children under five and 11,468 women of reproductive age (WRA).

CRWRC incorporated the strategic objectives into the three components of the C-IMCI resulting in the following key intervention activities:

- 1) Improve networking with health facilities in order to refer complicated pregnancies and severe childhood illnesses.
- 2) Increase the quality and availability of pre-natal, natal and post-natal care through training of traditional birth attendants (TBAs).
- 3) Promote key family practices critical for child health and nutrition through training CHVs and forming primary groups.

CCM will be integrated into on-going C-IMCI activities by improving the quality and availability of treatment for diarrhea and pneumonia through CHVs. CRWRC has a Health Coordinator and several Health Animators established within each partner organization who are responsible for many of the child survival program activities including the training of CHVs. The addition of diagnosis and treatment protocols for pneumonia and diarrheal disease will be easily integrated into the current child survival activities. The proposed study will be conducted in the Panchagor district.

OBJECTIVES

General

To develop a CCM strategy through CHVs to diagnose and properly treat diarrhea and pneumonia at the household level.

Specific

- a) To adapt simple clinical criteria and algorithms for CHVs to diagnose and treat pneumonia and diarrhea among children under 2.
- b) To train CHVs to use the clinical criteria and algorithms for community case management, including:
 - i) Early identification of sick children;
 - ii) Treatment for pneumonia with oral cefprozil (0-2 months of age) or oral cotrimoxazole (2-23 months of age) and diarrhea with oral rehydration solution and zinc;
 - iii) Appropriate referral for severe cases.
- c) To provide supervision to CHVs who are implementing CCM.
 - i) Create a supervisory tool for use with CHVs;
 - ii) Use existing health animators and IMCI trained doctors to supervise CHVs;
 - iii) Use community based organizations (a community group/committee) to monitor, support and ensure referral mechanism for the CCM.
- d) To establish a sustainable system for monitoring and evaluating CCM.
- e) To incorporate the treatment algorithms, training protocols, supervisory tool, and monitoring system for the CCM of diarrhea and pneumonia into the C-IMCI strategy for the GOB for rapid scale-up.

Hypothesis

CHVs can be used to properly diagnose and treat diarrhea and pneumonia at the household level with proper training, supervision, and monitoring. The number of suspected cases of severe diarrhea and pneumonia that receive proper treatment will increase using CCM when compared to the basic management and verbal referral of diarrhea and pneumonia by CHVs.

OPERATIONAL AND WORKING DEFINITIONS

Diarrhea: Based on WHO definition.

Pneumonia: Defined as the combination of at least two of the following symptoms: cough, difficult breathing, rapid breathing (>40 breaths per minute), chest in drawing or fever within preceding 30 days.

Community Case Management: The assessment and treatment of children under two with diarrhea or pneumonia by a CHV (UNICEF/WHO, 2006).

- *Assessment:* The CHV performs a targeted physical examination, including detection of chest in drawing; determination of respiratory rate using a watch, stopwatch or timer for pneumonia; and dehydration. The CHV may use a classification algorithm to make treatment decisions. Treatment decisions are based on the respiratory rate and signs of severe disease.
- *Treatment:* The CHV both prescribes and dispenses cefprozil or cotrimoxazole for pneumonia and oral rehydration solution (ORS) and zinc for diarrhea. The CHV may also monitor response to treatment by following up on the child in the home.
- *Referral:* CHVs are trained to recognize the signs of severe pneumonia and diarrhea that require referral to a health facility for treatment and monitoring beyond what can be provided in the community by the CHV. Referral cards will be used by CHVs to monitor referral outcomes.

Basic Management and Verbal Referral: Communication and awareness creation about prevention and treatment of diarrhea and pneumonia through CHVs (UNICEF/WHO, 2006).

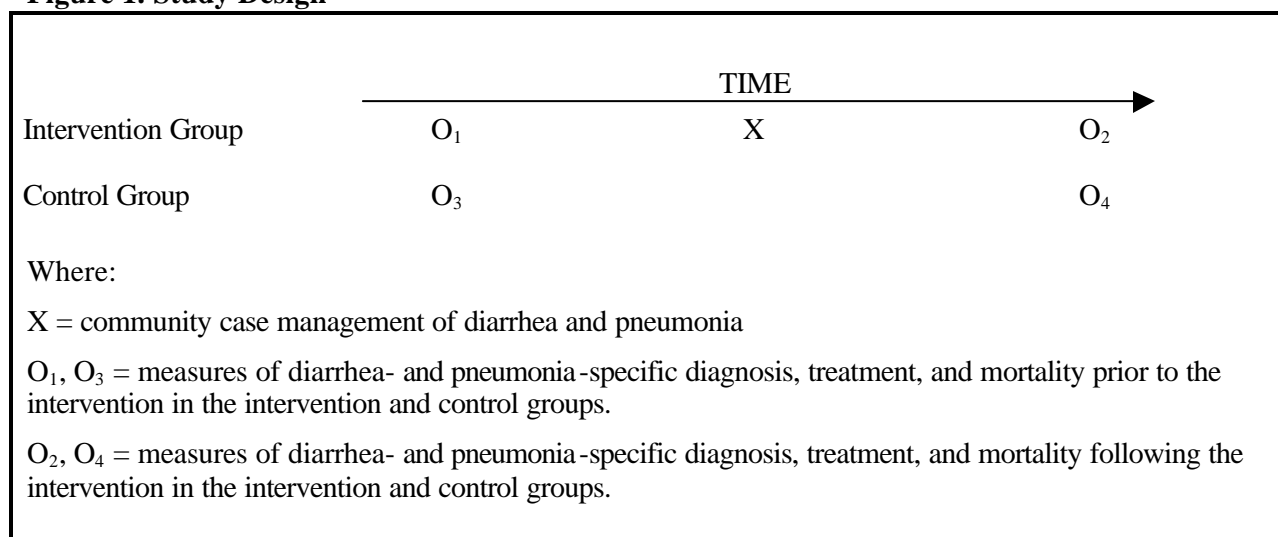
- *Assessment:* There is little assessment of children by the CHV beyond detection of dehydration and fever, and no use of algorithms.
- *Treatment:* CHV activities may include providing such treatments as vitamins, antihelminthics, or ORS. CHVs do not sell or provide antibiotics.
- *Referral:* If a sick child is identified as requiring treatment with antibiotics, the CHV will refer the child verbally to an existing health facility. The CHV also promotes care-seeking from health facilities through education during household visits.

METHODS

Study design

A quasi-experimental study design will be used to determine the impact of CCM for diarrhea and pneumonia by CHVs compared to basic management and verbal referral of diarrhea and pneumonia by CHVs. The design is shown diagrammatically in Figure 1.

Figure 1. Study Design



Study area

The intervention group will consist of select villages in the CSP working area in the Sadar Thana of the Panchagor district in Northern Bangladesh. The total population in the Sadar Thana is 230,440. According to a baseline assessment conducted in January of 2005, the period prevalence of diarrhea and ARI in Panchagor was 15% and 21% respectively in children under two years of age (CRWRC, 2005). The percentage of children with diarrhea who received ORS or zinc was only 64% and 14%, respectively. The percentage of children with fast or difficult breathing and/or cough who were taken to a health facility was only 29%. Due to the limited availability of quality health facilities, limited use of health facilities, and lack of appropriate home care, Panchagor is an ideal area to implement the CCM of diarrhea and pneumonia.

In order to ensure that the outcome of the intervention is solely attributable to CCM and not other interventions associated with the CSP, the control group will consist of villages in the same CSP working area. However, the villages will be separated geographically in order to ensure that the control group is not exposed to the intervention.

Target population

The target population will be children 0 to 59 months of age, focusing on children 0 to 23 months of age. The sample size will be large enough to be statistically valid for all major indicators.

Selection, Training, and Supervision of CHVs

Existing CHVs who work for in the CSP will be trained in CCM of diarrhea and pneumonia. CCM training will be given to the CHVs in addition to basic training on key family practices and safe deliveries. Table 1 depicts the criteria that were used to select CHVs for training in CRWRC's CSP and gives a summary of the training previously received by the CHVs (CRWRC, 2005). Additional training on diarrhea and pneumonia case management will follow UNICEF and WHO guidelines (UNICEF/WHO, 2006; WHO, 2002) and will include topics such as classification of ARIs and diarrheal diseases, analysis of the causes and factors that contribute to these infections, examination of diarrhea and pneumonia case studies, counting respiration rate, advice on patient care, and use of referral card. The Bangladesh Field Office of Save the

Children-USA has been implementing CCM for ARI and diarrhea through CHVs in rural communities since 2004 through its NGO Service Delivery Program. CRWRC will adapt the training materials used by Save the Children to provide the additional training on CCM.

Table 1. Selection Criteria and Training Curriculum for CHVs

Selection Criteria	Training Curriculum
<ul style="list-style-type: none"> • Preferably between 25 and 45 years of age • Eight years of schooling • Accepted/approved by the community • Healthy • Consent from the family/husband • Have some knowledge about health • Willing to receive training • Willing to provide volunteer service to the community after receiving training • Ability/capacity to give motivation • Permanent residence in the area 	<ul style="list-style-type: none"> • Cause of maternal and child morbidity and mortality • Pregnancy and neonatal care • Maternal danger signs and referral • Postnatal vitamin A supplementation and periodic vitamin A supplementation among children • Iron importance • Deworming in pregnant women and children • Immunization (mother and child) • Use of zinc and ORS in diarrhea • Identification of pneumonia (ARI) • Identification of child danger signs/symptoms and referral • Breastfeeding and complementary feeding practices

Supervision of the CHVs will be provided by CRWRC Health Animators or local doctors who have completed the IMCI training by the GOB. Each supervisor will be responsible for 10 CHVs and each CHV will cover 50 households. Supervisors are expected to visit their volunteers once a month to discuss any problems or questions and to provide suggestions for diagnosing and treating patients. The supervisor is also expected to routinely monitor the performance of the CHVs by re-examining each child treated for pneumonia or diarrhea, interviewing the family and the CHV, decide whether any errors had been made, and provide appropriate feedback to the CHV.

Monitoring and Evaluation

Table 3 describes the variables to be monitored, the source of the data, the frequency, and the area over the course of one year.

Table 3. Monitoring and Evaluation Plan

Variable	Description	Source of data	Frequency	Working area
Rate of treatment	Proportion of cases properly treated	Record keeping by CHV, clinic records	Baseline and Final Evaluation	Intervention and Control
Rate of referral	Proportion of cases properly referred	Record keeping by CHV	Baseline and Final Evaluation	Intervention and Control
Case fatality rate	No. of deaths per case identified	Record keeping and referral slips	Throughout intervention period	Intervention and Control
Quality of service	Proportion of cases correctly diagnosed and treated by CHVs	Case follow-up interview with family and service provider by supervisor	Throughout intervention period	Intervention
Community acceptance	Community's preference of service provider	Interviews with select families	Final Evaluation	Intervention

ETHICAL PERMISSION

Prior to the implementation of the study, ethical approval will be requested from the Bangladesh Medical Research Council.

TIME FRAME

Activity	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Hire key personnel	X											
Baseline assessment	X	X										
Adaptation of training materials	X	X	X									
Development of monitoring and evaluation tools	X	X	X									
Selection of CHVs and supervisors			X									
Training of CHVs			X	X								
Training of supervisors			X	X								
Implementation of CCM				X	X	X	X	X	X	X	X	
Monitoring of CCM through follow-up interviews				X	X	X	X	X	X	X	X	
Monthly supervisor meetings with CHVs					X		X		X		X	
Final evaluation, analysis, and report											X	X
Dissemination of results												X

DISSEMINATION

Potential to expand CCM activities through C-IMCI is great due to the GOB's commitment to the C-IMCI strategy. The Government IMCI working group has incorporated CRWRC CCM activities into its 2006 workplan and will be involved in the final evaluation of the proposed research. If CCM is successful in achieving higher treatment rates without compromising quality, then the GOB is more likely to include CCM in its on-going C-IMCI strategy. CRWRC will host a National Advocacy Workshop after the final evaluation to disseminate the final results and discuss next steps with the major stakeholders including the Ministry of Health, international non-governmental organizations, International Centre for Diarrheal Disease Research in Bangladesh, US Agency for International Development, United Nations Children's Fund, and World Health Organization. It is hoped that out of this work, CRWRC and the GOB IMCI working group can develop the protocol for scaling up the role of the CHVs and TTBA's for CCM of diarrhea and pneumonia. The global benefits include learning how CCM can be integrated into an existing community-based government strategies and how to work with the government and civil society to scale-up CCM.

BUDGET

<i>Personnel (includes salary and benefits)</i>	<i>% LOE</i>	<i>\$/mo X months</i>	<i>Total (US\$)</i>
Field Research Officer (n=1)	100	\$450 X 12 months	\$5,400
Field Research Assistant (n=1)	100	\$350 X 8 months	\$2,800
Data Management officer (n=1)	100	\$300 X 4 months	\$1,200
<i>Personnel Subtotal</i>			\$9,400
<i>Travel</i>			
Local transport	Travel by CRWRC and Supoth staff		\$1,000
<i>Contractual</i>			
Consultant with experience in CCM and C-IMCI to assist in development of a CCM protocol for CHVs and TTBA's	Fees, transport and accommodations		\$7,500
<i>Supplies and Materials</i>			
Computer (n=1)			\$700
Cell phone (n=1)			\$500
Office supplies and stationery			\$1,000
<i>Supplies Subtotal</i>			\$2,200
<i>Other Direct Costs</i>			
CHV training in CCM (n=30)	Basic training; monthly meetings and follow-up		\$2,500
Supervisor training and stipend (n=5)	Supervisory skills training; monthly meetings and follow-up		\$1,000
National Advocacy Workshop	Approx. 50 participants		\$2,000
Monitoring and Evaluation			\$2,000
Miscellaneous			\$1,000
<i>Other Direct Costs Subtotal</i>			\$8,500
<i>Indirect Costs</i>			
NICRA 7.81%			\$2,150
Grand-total			\$37,050

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Annex 5

PARI Project – Indicators and Dashboard

Component 1 – Health Outcomes

1. Percent of children age 0-23 months who are under-weight
2. Percentage of children age 0-23 months whose delivery was attended by skilled health personnel
3. Percentage of mothers with children 0-23 months who received at least two tetanus toxoid injections before the birth of the youngest child less than 24 months of age
4. Percentage of severe under nourished children under 2 years.
5. Percentage of children under 12 months who are fully immunized against the six vaccine preventable disease before the first birth day
6. Percentage of children aged 0-5 months who were fed breast milk only in the last 24 hours
7. Percent of infant aged 6-9 months who received semi-solid or family foods in the last 24 hours
8. Percent of mothers of children age 0-23 months who mentioned at least two of the responses that relate to safer sex or practices involving prevention of HIV
9. Percentage of mothers of children age 0-23 months that have soap readily available for hand washing
10. Percentage of mothers of children age 0-23 months who report at least two child danger signs/symptoms
11. Percentage of children aged 0-23 months with diarrhea in the last two weeks who were offered more fluids during the illness
12. Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered the same amount or more food during the illness.

Component 2 – Health and Social Services

1. One CHV per 16 households will be trained to work in key area related to maternal child health.
2. One supervisor visits 20 CHVs at least quarterly.
3. Percentage of Vitamin A capsule consumption during postnatal care.
4. Rate of deworming use in children 2-5 years of age every six months.
5. Percentage of pregnant women who received at least 4 prenatal visits.

Component 3 – Organizational Capacity

1. They have constitution/bylaws and policy guideline.
2. There is legal registration of local organization to work in the area
3. There is an agreement to work in a participatory way with other like minded organizations.
4. There is a transparent accounting system.
5. There are representatives from all communities.
6. They hold meeting regularly (once a month)
7. There is participatory planning and implementation.
8. There is an elected and approved management committee.

Component 4 – Organizational Viability

1. Leaders are aware of their responsibilities and financial policy in the organization.
2. The activities of the people's institution are taken on the basis of the demand of the community.
3. Leaders make plans and give training through mutual understanding
4. Transparent responsibility and regular progress are observed.
5. Leaders regularly visit the project activities, progress of works and members of the PI.

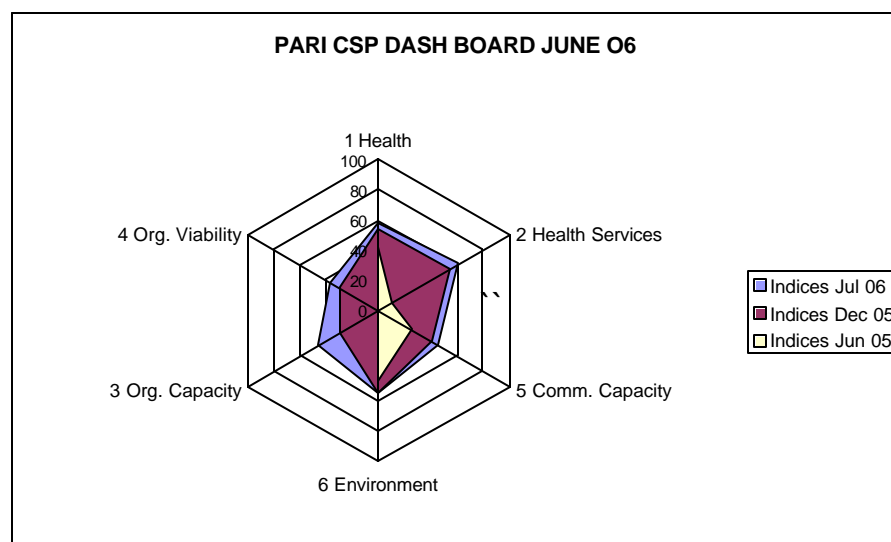
Component 5 – Community Competence/Capacity

1. All members accumulate savings regularly.
2. They identify their own problems and solve them by themselves.
3. Five of all members make a plan in a participatory way and everybody knows it.
4. Members select new leaders in democratic way.
5. Groups are respected in the society.

Component 6 – Ecological, Human, Economic, Political and Policy Environment

1. Increase the percentage of household that will have access to sanitary latrine
2. Mothers literacy rate

3. Tubewell water use
4. Tree plantation for keeping ecological balance



SATHI Project – Indicators and Dashboard

Component 1 – Health Outcomes

1. Deliveries attended by TTBAAs.
2. Pregnant mothers are immunized at least two doses of TT.
3. Pregnant mothers know at least two danger signs of pregnancy.
4. Pregnant mothers dietary practices during pregnancy.
5. All eligible children are immunized.
6. Children continue exclusive breast feeding.
7. Children continue breast feeding up to two years.
8. Children receive complementary food from 6 months.
9. Children under 2 years of age received anti-helminthic every 6 months.
10. Children received extra fluid during diarrhea and illness.
11. Children are taking zinc during diarrhea.
12. Children under age 2 are growing according to their age and height.

Component 2 – Health and Social Services

1. 1 CHV visit 42 household per month.
2. 1 supervisor visit 20 CHVs at least quarterly.
3. Pregnant mothers visited by TTBAAs per month in last 6 months.
4. U-5 children participated in growth monitoring in last month.
5. The People's Institution (PI) health fund is being used for addressing emergency maternal and child illness as per their policy.
6. 1 meeting with health facilities in working areas in last 6 months.
7. Children aged 0-11 months have immunization card in last month.

Component 3 – Organizational Capacity

1. Policies are in place which are followed regularly and reviewed as necessary.
2. PI has registration.
3. There are equal opportunities for both male and female members for learning and training.
4. The PI practices equal responsibilities as well as opportunities for both male and female members.
5. PI has visionary and every PI has 5 good leaders.
6. PI has strong fund raising plan as well as capacity.
7. PI has approved and transparent account keeping system and 5 members are capable of maintaining accounts.

Component 4 – Organizational Viability

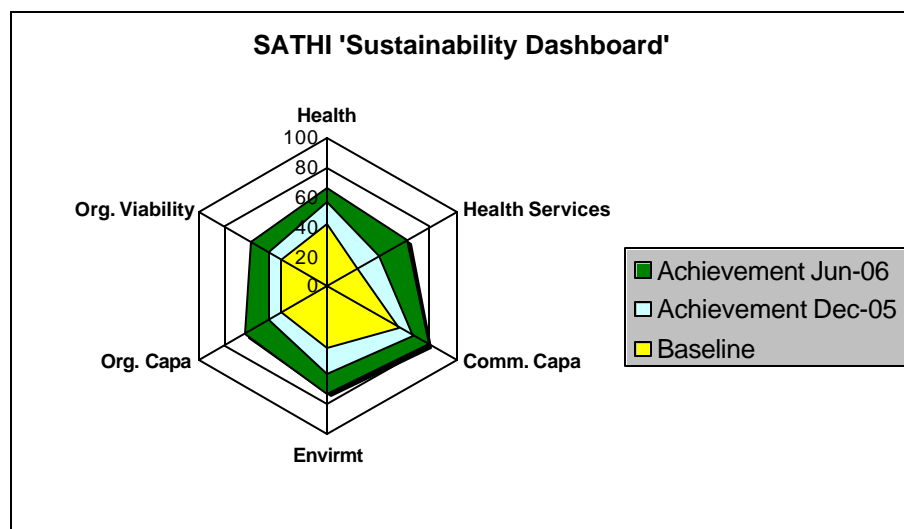
1. PI executive committee is well aware of the policies and they practice them.
2. PI implements community based program effectively.
3. PI has training program for group members on health.
4. PI executive committee is well known about GO/NGO health services and they have a good relationship with them.
5. There is a clear accountability and regular monitoring system.

Component 5 – Community Competence/Capacity

1. All members of the groups are doing savings regularly of their own accord and managing by themselves.
2. Group is well respected and accepted in the society.
3. They have five skilled members who are implementing the plan following the participatory way.
4. All groups have their own bylaws which they follow.
5. They have skilled leaders and change the leadership body each year through participatory and democratic process.
6. Group members continue the literacy course and encourage others in the community to take the literacy course and practice it regularly.
7. Members can properly write the passbooks as well as understand about the keeping of accurate passbooks and help others in writing.
8. Group plays an active role in GO and NGO bodies through their intermediary group for receiving their services for the community.

Component 6 – Ecological, Human, Economic, Political and Policy Environment

1. Community people have access to safe water.
2. The community people are aware of the marriage law and can state at least 4 issues.
3. The community people are aware of civil rights and they are enjoying.
4. The literacy rate increases in women of reproductive age.
5. Community people have access sanitary latrines.



SUPOTH Project – Indicators and Dashboard

Component 1 – Health Outcomes

Same as PARI

Component 2 – Health and Social Services

1. One Community Health Volunteer for every 40 households will be trained to work in key areas related to maternal-child health.

2. Every 20 health volunteers will have a supervisor who visited and observed their job performance at least quarterly.
3. Percentage of pregnant women visited by TTBA per month in last six months
4. Percentage of children participated in growth monitoring in last month.
5. Percentage of children aged 0-11 months have immunization card in last month.
6. At least one meeting in last six months with health facilities in working areas with health sub-committee TTBA & CHVs.

Component 3 – Organizational Capacity

1. Policies are in place and assured they are regular.
2. The organization has legal permission to work.
3. Working agreement with other partners and other collaborating organizations are in place.
4. There is demonstrated fund raising /marketing ability.

Component 4 – Organizational Viability

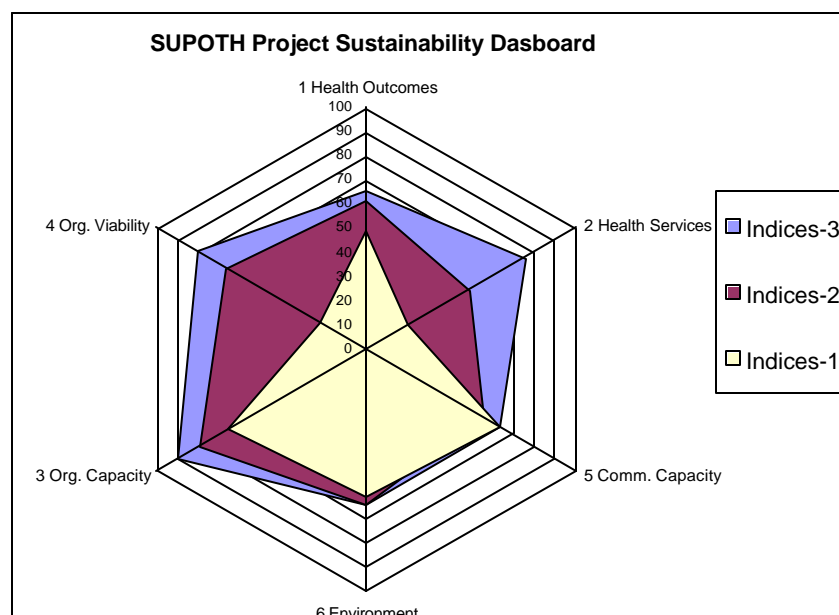
1. There is good relationship between CSP staff & Federation.
2. Programs are relevant to the needs of the people and are effective and reach our target population.
3. Work plan prepared through participatory method.
4. Activities of the organization is monitor regularly.

Component 5 – Community Competence/Capacity

1. All members are saving regularly and this is managed by the group independently and group can correct problems independently.
2. 5 members make the plan, keep writing the plan, and follow it with all group members' participation.
3. Members independently follow a democratic process each year to select new leadership.
4. Members can properly write the passbooks and understand about keeping an accurate passbook.
5. Group is well respected and accepted in the society.
6. Group plays an active role in community in various government and NGO bodies through their intermediary group.

Component 6 – Ecological, Human, Economic, Political and Policy Environment

1. Percentage of households with access to safe and arsenic free water from piped water source or covered well within 15 minutes walking distance.
2. Proportion of household with access to sanitary latrines.
3. Government, NGOs and other CBOs are interested to help the health services program.
4. Government policy is very helpful for the organization.

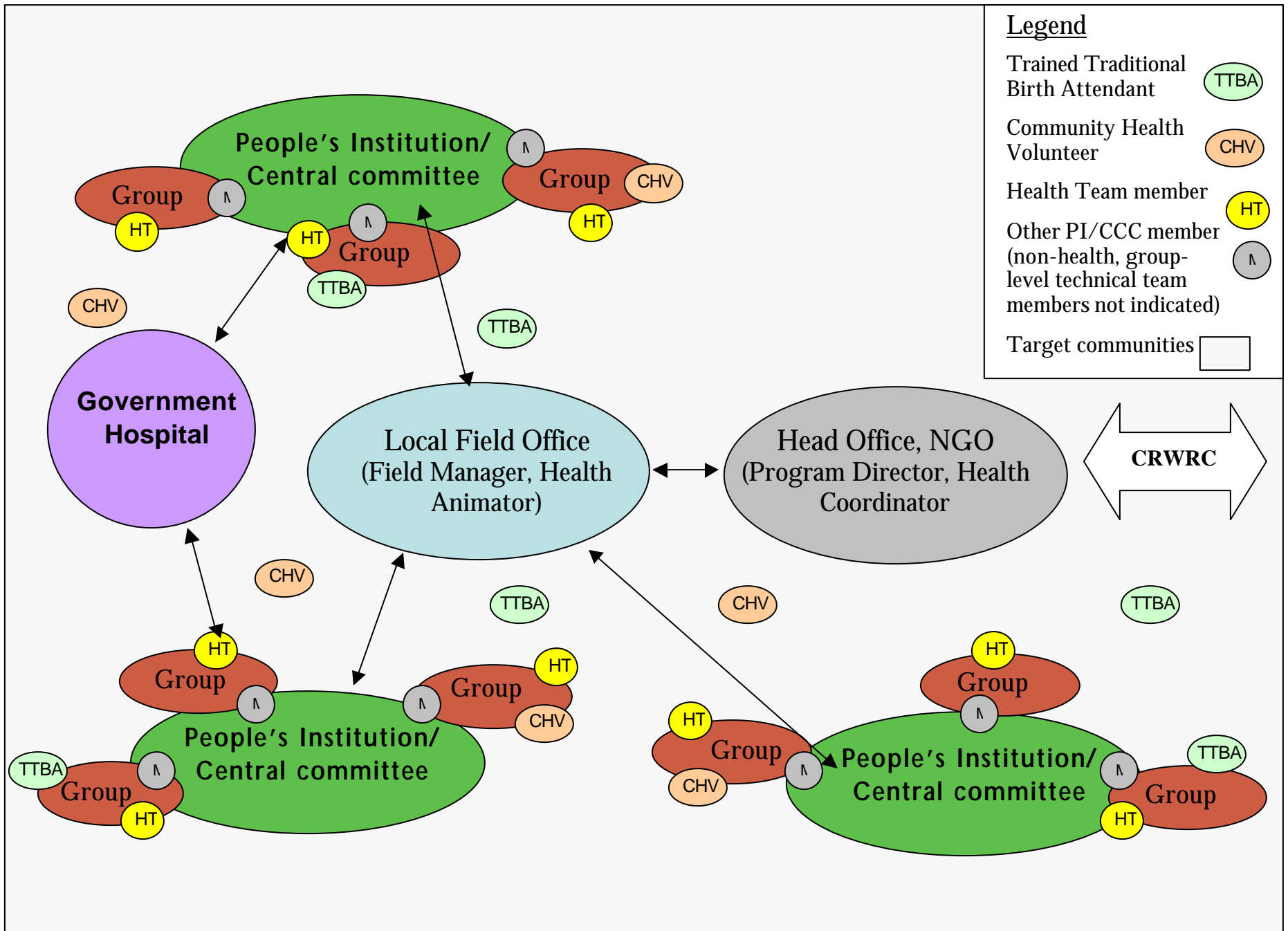


Annex 6

REVISED BUDGET

See Excel Spreadsheet.

Annex 7



Annex 8

Scaling-Up Zinc for Young Children with Diarrhea through Village Health Care Providers and Drug-Sellers: Findings of a pilot study from a Child Survival Program in Bangladesh

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Objective: A pilot study was designed by Christian Reformed World Relief Committee to evaluate the impact of training offered to the village health care providers and drug-sellers on the use of zinc along with ORS in children with diarrhea.

Method: Baseline survey was carried out in 900 children aged 0-23 months in September 2005 in 4 slums of Dhaka city, three unions of Netrokona, and two unions of Panchagar district. Information was collected from mothers on childhood diarrhea morbidity in last 2 weeks, and use of ORS, zinc and medicines. A total of 105 village health care providers or drug-sellers were trained on the use of zinc syrup available in the market along with ORS in children with diarrhea as recommended by WHO/UNICEF during September-November 2005. An evaluation was conducted in January 2006 to assess compliance of zinc syrup in 900 children with diarrhea. Data on use of zinc syrup was collected from village health care providers and drug-sellers before and after receiving training.

Result: At baseline, the prevalence of diarrhea was 18% (158/900), and of them only 3 (2%) children received zinc syrup along with ORS. After training at the time of evaluation, use of zinc along with ORS increased to 17% (n=16) in 95 children with diarrhea [OR=0.10, 95% CI (0.02-0.36), p<0.001]. At baseline two children received zinc from village health care providers and drug-sellers, and one from local health facility while at the time of evaluation, 13 (81%) children were found to receive zinc from village health care providers and drug-sellers, and the rest received from local health facilities. Six percent of children with diarrhea at baseline and 14% at the time of evaluation did not visit any health care provider but none received zinc syrup. Among the children who received zinc during diarrhea, only 13% caretakers complained of vomiting but these children continue to receive zinc for 10-14 days or their mothers expressed their intent to adhere to the compliance till 10-14 days. At baseline, of the total 105 village health care providers and drug-sellers, 28% did not know the use of zinc at all, 36% were using in diarrhea, 58% in anorexia, and 3% were using in other health conditions such as fever. After receiving training, zinc-use rate increased from 36% to 97% [OR=0.02, 95% CI (0.00-0.06), p<0.001] in diarrhea, and from 58% to 66% [OR=0.72, 95% CI (0.40-1.31), p=0.26] in anorexia. However, 3% of village health care providers and drug-sellers were found not to use zinc because they were not well convinced regarding its utility in diarrhea.

Conclusion: Training of the village health care providers and drug-sellers demonstrated a significant increase in their practice in using zinc during childhood diarrhea.

Annex 9

Promotion of Infant and Young Child Feeding Practices through Community Health Volunteers: Experience from a Child Survival Program in Bangladesh

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Background: The Christian Reformed World Relief Committee has been implementing a Child Survival Program and covers 1700 under-five children and 3000 women of reproductive age (WRA) in the Durgapur and Kalmakanda Upazilas of Netrokona district, Bangladesh over a 5-year period. Community Health Volunteers (CHVs) have been trained to promote infant and young child feeding (IYCF) practices. Since December 2005, each CHV has promoted IYCF messages fortnightly, using a flip chart and discussions among groups of 12-15 WRA.

Objective: To evaluate the impact of the promotion of IYCF practices through CHVs on exclusive breastfeeding, introduction of appropriate complementary feeding, and feeding practices during illness.

Methods: A baseline survey was carried out on 300 children aged 0-23 months following a 30-cluster sampling procedure in September 2005. Information was collected from mothers on breastfeeding and complementary feeding practices, and feeding practices during illness. After 6 months of promotion of the IYCF practices through CHVs, an evaluation was conducted in June 2006 on 100 children aged 0-23 months following Lot Quality Assurance Sampling procedure using the same questionnaire.

Result: The rate of exclusive breastfeeding for the first 6 months of life increased significantly from 30% before intervention to 63% after intervention [OR=0.28, 95%CI (0.10-0.75), $p<0.004$]. Before the intervention, 87% mothers were found giving colostrum to their newborn. This rate increased significantly to 97% after receiving IYCF education from CHVs [OR 0.21, 95%CI (0.05-0.72), $p<0.005$]. The rate of introduction of appropriate complementary feeding of children between the ages of 6 and 9 months increased from 37% to 44% [OR=0.76, 95%CI (0.21-2.7), $p=0.628$]. Regular consumption of vegetables and fruits by children aged 6-23 months was found to be significantly higher after intervention compared to before intervention [32% vs. 9%, OR=0.22, 95%CI (0.10-0.44), $p<0.001$]. After intervention, the rate of children with an illness who were given the same or increased amount of breast milk, fluid and/or food increased from 65% to 70% [OR=0.82, 95%CI (0.46-1.44), $p=0.465$]. 36% children with diarrhea received zinc along with ORS after intervention while none received before intervention (OR=0.00, 95%CI (0.00-0.26), $p<0.001$).

Conclusion: Promotion of IYCF practices through CHVs is an appropriate and potential approach to increase the rate of exclusive breastfeeding, complementary feeding practices and feeding practices during illness.

Key words: Infant, exclusive breastfeeding, complementary feeding, illness, zinc.